

ON WELSH AND HARTLEY AS STEAM COAL.

Newcastle-upon-Tyne, Aug. 20.

47. *Lincoln's Inn-fields. London. Aug. 18.* J. HENRY JOHNSON.

MR. RODDA'S ORE REDUCING PROCESS.

INTERNATIONAL EXHIBITION—THE JURIES.

THE INTERNATIONAL EXHIBITION—THE AWARDS.

London, Aug. 20.

some satisfactory results may be predicted.

G. HENWOOD.

WHEAL LUDCOTT

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11, Aug. 20.

THE CRIMINALS OF MINING BROKERS

Sir,—If any of your readers will take the trouble to refer to my second letter—the head of "East Carn Brea versus East Caradon," which appeared in the May 3, page 291, they will find that, notwithstanding the abuse which I received calling serious attention to the exaggerated statements which I then urged had reference to East Carn Brea, it has fairly proved that East Carn Brea could not be so amply justified. I think that East Caradon was of 1861; and now, after about forty years, and with only the same period to complete the year, the shares are lower prices than they were at as the time I wrote, and the state of the mine appears to justify even the present price. I also pointed out that the responsibility of management of West Bassett did not secure from heavy loss by the usual remark in such cases, who had purchased at high prices; and although we have been reduced to purchase East Caradon at a similar result has befallen those who were lately induced to purchase East Caradon when they were from 181. to 201. per share—may, more, for in a paragraph published in the *Daily News* last Tuesday, the management is at last compelled to give clearly wisdom to make the most of the mine.

As to the state of the mine, I cannot do better than refer to the special report, will probably, be found in another part of your Journal, by Capt. Fawcett and Whistler Frances—and that I have reasons for saying can be truly termed honest and I would gladly ask whether, from the official reports of late, any person known that for the last 12 or 14 ms., both in the 50 and at the bottom of the 50, been of no commercial value—that in the western part, and that the lode in the west was being stopped away by no less than fourteen men, and that the lode in the east for the first 2 ft. was worth 25l. per ton, sinking below the 40, overtook whilst there had been a falling off in the financial prospects of the mine. At 50. In short, such is the present state mind the south lode has been seen at the dividend ought to be declared until more than 13 months, during which period it must be greatly diminished, unless further important discoveries made. It will now, perhaps, form a better opinion of my advice, to have every mine agent, an independent competent agent before investing; but if in East Carn Brea, many others, should have been a large loss, not only in East Carn Brea, but Comstock, Tolvadden, and Ludcott, all of which, if their turn, have been commended by the brokers. This leads me to notice the unseemly exhibition of sion and spite which, judging from the first paper of last week's *Mining Advertiser*, exists amongst these advisers of the public, upon contradictory evidence, since time, that the brokers, by their frequent contradiction of one another, preference to market operations, enlighten the public to a much greater extent probably intended. For example, one broker evidently tries to show how he offers to buy 350 shares at 10½, and by damaging the opinions of those who recommended East Carn Brea at 10½, and upon the references to East Carn Brea Ludcott (what other reasoning can be put upon the references to East Carn Brea), other who, by the way, was once a firm supporter of that mine, now recommends otherwise, who recommended me to increase my knowledge of that mine, now says, "I don't intend to sell 100 either for cash or time on;" while some of these gentlemen cannot offer to buy 500 Ludcotts at 10½.—Surely they had been bona fide buyers of the stock, so stupid as not to perceive that if they had been bona fide buyers of the stock, and above 10½, the price never could have fallen, almost immediately afterwards, and above 10½, the price never could have fallen, almost immediately afterwards, and appeared to 9. Again, another holder of high priced Ludcotts should be sold; namely, that at the present ridiculously low high priced Ludcotts should be sold; and all surprised if his advice proves to be the most sensible and the best.

thought the better way would be to issue new shares, and offer them, *pro rata*, to the existing shareholders at a price that would be an inducement to take them. For instance, if 5000 shares of 11. each were issued to the proprietors at (say) 7s. 6d. or 8s. per share, they might feel assured that the whole would be taken up, and sufficient funds would thus be provided to enable the directors to pay the cost-shares more readily, and to keep a balance at the bankers to meet contingencies.

Mr. BARNHAM fully concurred in the view of the last speaker, that the best mode of raising additional capital was by the issue of new shares, *pro rata*, among the present shareholders. If those shares were issued, as suggested, at 7s. 6d. or 8s. per share, should any individual shareholder decline to take up his rateable proportion there would be other shareholders willing to take more than their proportion.

Mr. MILFORD said as it was desirable that the capital should be raised, he was inclined to advocate the allowing of a discount for prompt payment.

Mr. BARNHAM said he should certainly oppose a discount being allowed, for it was contrary to all business habits. If the money was not paid within a given time he should most assuredly charge interest up to the day of payment. He considered that allowing discount was a vicious system, and wrong in principle.

Mr. MILFORD said that, however wrong it might be in principle, it was a plan that was found to work exceedingly well and successfully, and one now very generally adopted.

After some further discussion, upon the proposition of Mr. WHEAT, seconded by Mr. CLEVE, it was resolved that in order to provide a capital of 3000*l.*, for the further development of the mine, the directors be authorised to issue 5000 shares of 11. each, at 8s. per share, such shares to be offered, *pro rata*, to the present shareholders, and that such shares be entitled to equal profit and privileges with the 10,000 shares. It was further resolved that the 8s. per share be paid by two instalments, one of 5s. within 21 days from this day, and the remaining 3s. in three months.

The directors having been re-elected, a cordial vote of thanks was passed to the Chairman for his courteous conduct in the chair, and for the great interest he continues to take in promoting the welfare of the company.

WHEAL UNION MINING COMPANY.

A special and general meeting of proprietors was held at the company's offices, Thread-needle-street, on Tuesday, Mr. W. A. THOMAS in the chair.

The special meeting was convened for the purpose of forfeiting shares in arrears of call, but the Secretary having reported that all the arrears had been paid, no resolution was passed, and the business of the general meeting was proceeded with.

Mr. BUCKLEY (the secretary) read the notice convening the meeting, and the minutes of the last were read and confirmed. A statement of accounts was submitted, from which the following is condensed:—

Tin sold	£146 5 0
Advanced on tribute	48 0 0
Fines	0 18 6
Calls received	1792 0 2 = £1979 3 8
Balance last audit	£419 17 5
March mine cost, merchants' bills, &c.	283 11 11
April ditto	366 17 7
May ditto	365 12 3
June ditto	452 13 11
Advance on tribute	30 0 0
Interest and commission	18 8 6
Sundries	19 3 4 = 1949 4 11
Leaving credit balance	£ 20 18 9

The following report was then read:—

Aug. 18.—In the 18, driving east of the eastern shaft, the lode is 9 ft. wide, composed of gossan, intermixed with mundle and copper ore. In the winze sinking below the 18 (45 fms. west of the present end) the lode is 2 ft. wide, producing stones of copper ore. The 30 is extended 5 fathoms east of the eastern shaft, the lode is 1 ft. wide, producing stones of tin, but not to value. The eastern shaft is sunk 11 fms. below the 30; the lode is unproductive. During the past month the 40 has been suspended, and the men placed to rise against the eastern shaft, which will be communicated in a few days, after which we shall resume driving with all possible dispatch, to get into the promising lode driving through in the 18. The flat-rod shaft is down 4 fms. below the 60; in the last 6 ft. sinking the lode has improved, and in the bottom of the shaft it is worth 20*l.* per fm. for tin, with a branch of copper 4 in. wide on the north wall. Moyle's shaft is down 7 fms. below the 46, and by sinking a few fathoms further we shall intersect the turnpike lode. I consider the prospects very encouraging, and shall push on our operations with all possible dispatch. —T. GLANVILLE.

The CHAIRMAN having moved the adoption of the reports and accounts, stated that he believed Union would, when sufficiently developed, be one of the most important mines of that celebrated district. As regarded the financial position of the company, he was strongly of opinion that a call should be made sufficient to carry them on for four months, by which time some satisfactory result might be achieved.

Mr. G. BATTERS called attention to what he considered the most important features in the report—the improvement in the lode in the shaft sinking below the 30, and the promising character of the lode in the 18 fm. level, being now 9 ft. wide, and composed of gossan and ore. The 40 would in a short time come under this point, where there was every reason to expect a rich deposit of copper ore. He reminded the proprietors that their property was situated in the rich Carn Brea district, and that most of the experienced agents in Cornwall were of opinion that as the operations were extended they would come into the same parallel whence the neighbouring mines had made, and were continuing to make, such great riches; and for his own part, he could see no reason, geologically speaking, why Union should prove an exception to the great success which had attended mining operations in that celebrated district.

The CHAIRMAN said he certainly considered the Union would prove equal to any mine in the neighbourhood, but development was required.

The report and accounts were received and adopted, and upon the proposition of the CHAIRMAN, seconded by Mr. PAGE, a call of 4s. per share was made.

The proceedings terminated with a vote of thanks to the Chairman.

TRUTH'S ECHOES, OR SAYINGS AND DOINGS IN MINING.

The Mining Share Market has not recovered from the severe and unprecedented shock which it has sustained through the depreciation of Wheal Ludcott. The continued conflicting reports which have been published, and the opinions of different agents, some well qualified from their high standing for veracity and generally unbiased characters, have proved of considerable assistance to those interested in depressing the value of the shares. Constant fluctuations have taken place during the week, which have a tendency to preclude even speculators in the stocks from venturing on such vacillating ground. In my remarks last week, by some unaccountable oversight, I substituted the word "Bears" for "Bulls," which ought to have been reversed, but even a casual reader would readily perceive the error. The market generally has been dull, and comparatively little business has been transacted, more than in the usual favourite stock; nor is it likely to improve until we get beyond the influence of this uncongenial black cross-course.

There has been a good enquiry for DEVON GREAT CONSOLS, SOUTH CARADON, WHEAL SETON, and WEST SETON, but the scarcity of shares has been felt. —SOUTH FRANCES and EAST BARRET have also been sought for. —COOK'S KITCHEN and STRAY PARK have changed hands, at rather lower rates. —EAST WHEAL GRENVILLE have been in good demand, and prices have advanced in consequence. —WHEAL GRENVILLE continues without any improvement. —EAST CARADON have fluctuated, but shares are freely taken at minimum quotations; and, from the approximation of the cross-cut to the lode at the 70, much exciting business is expected. —MARKE VALLEY have been in good demand, in consequence of lower quotations. —TREVAUNY have been in fair request, at former prices. —MARTIN'S have advanced, and are in good demand. —NORTH TREVAUNY are quiet, at lower rates. —EAST RUSSELL, NORTH ROBERT, SORTRIDGE, and LADY BERTHA have been inactive, and the little business done has been at lower prices. —THRELOWETH, WHEAL UNY, and UNITY have been dealt in at nominal prices. —NORTH TREKERRY have receded, and shares have been offered at lower rates than last week. —NORTH DOWNS, NORTH ROBEAR, and NORTH CROFTY all feel the effects of the general depression.

WHEAL HARBRETT and KITT (St. Agnes) have been in fair request, and business done at good market prices. —WHEAL HARBRETT, ROSEWARNE, and WEST ROSEWARNE CONSOLS have declined and sellers are inclined. —WHEAL MARGARET and PROVIDENCE shares have changed hands, and an active enquiry has been kept up. —SPEARKE MOOR and CARNYORTH have found buyers. —ROSEWALL HILL and RANSON UNITED have been in fair request.

EAST CARADON.—The ground in the 70 cross-cut continues very favourable for driving, and the lode is expected to be intersected at that point daily. The north lode, recently intersected, continues to produce good stones of ore. The 60 east, on the counter lode, is worth 12*l.* per fm., and the 50 east from 12*l.* to 16*l.* per fm. The new lode in the 50 east is worth 8*l.*, and the same level west 6*l.* per fm.; the 50 west is valued at 6*l.* per fm. The 60 east, on Fawcett's, is also worth 6*l.* per fm. The sale of 482 tons of copper ore on Thursday, at Truro, realised 296*l.* 17*l.* 6*l.*, and as there is generally some overweight, 3000*l.* may be calculated for the month. Another correspondent, in a letter dated the 21st inst., states—"The lode is not yet cut in the 70, but the ground continues to improve as the cross-cut nears it; the ground in the end is a beautiful light elvan, and there is also an increase of water issuing from the cross-cut, this I take it is strongly in favour of cutting a rich lode in this level."

MARKE VALLEY continues to look very well, and the large reserves of ore rather improved than lessened. The recent discovery is one of the lodes referred to by the manager at the last meeting, which he shortly expected to intersect by the cross-cut north; the lode is about 2 feet wide, producing 1 ton of good ore per fm. They have not driven on it as yet, but will do so as soon as the cross-cut is sufficiently extended to admit of another party of men to drive on the course of the lode, without impeding the operations of each other. The development of this lode is expected to add importantly to future samplings, as well as improve the quality of the ore. The 418 tons sold on Thursday, at Truro, realised 1794*l.* 8*l.* 6*l.*. —SOUTH FRANCES: The operations here are chiefly confined to driving cross-cuts south to cut the Marke Valley lodes.

At CALSTOCK CONSOLS, the Danescombe lode continues to hold out considerable promise, and they are still driving into the hill, which will leave an extensive piece of mineralised ground to explore. It is stated that the deeper levels are to be abandoned, and the operations in future will be especially directed to the more encouraging prospects that are found in shallow levels. —At OKEL TOR the prospects are of a more encouraging character. In the 50 east they have a large and productive lode, yielding 10 tons of ore per fm., being rather coarse work, is estimated worth 40*l.* per fm. They have also a productive lode in the back of the 65, and other places are looking more favourable.

WHEAL POLMAR account for four months was held on the 14th, when the financial statement showed a debit balance of 221*l.* 12*l.* 6*l.* to the end of April; since then copper ores, &c., amounting to 1295*l.* 14*l.* 7*l.* have been sold. Against the above balance and merchants' bills, 368*l.* 8*l.*, with the subsequent working costs, &c. The decline in the standard seriously affected the profits, otherwise they would have been out of debt. The agents' report of the mine is of a favourable character, and represent the several points that are expected to come off productive before the next meeting, when a considerable change may be fairly anticipated. The next sale will be on the 29th, when 110 tons of copper ore will be ready, and they have about 90 tons of mundle at surface. They also calculate on being able to keep up their present returns until more productive ground is laid open, when their samplings will increase.

At WHEAL HARBRETT the prospects are again of a more brightening character, inasmuch as the recently-discovered copper lode known as Alexander's continues to look well in the 50 level; the bottom of the level is reported to be worth 25*l.* per fm., and the lode is about 2 feet wide, producing 1 ton of good ore per fm. Other parts of the mine, together with the tin in the 100, are of the same promising character.

EAST CARN BREA is reported to have fallen off in most of the ends, and the lode, which looked so well in the 40, has also lessened in value. The reserves of ore are estimated at upwards of 40,000*l.*, which must now be looked to for assistance to keep up the samplings, unless some early discovery be made, which probably may be met with before the lode has been opened on. In the 60, for a very good run of rich ore ground has gone down below the 50.

WHEAL UNY holds out most promise. The lode in the bottom level west is reported to be of a very promising character, now worth 12*l.* per fm. Most of the western ends

are looking very encouraging for tin, especially in the 60 fm. level. They sampled, on Tuesday, 60 tons of copper ore.

ST. JUST UNITED reported to possess the elements of a great and prosperous mine. The immense quantity of ground which has been laid open by the extensive operations of the former company when tin was very low, and but little of the produce brought to surface, will become available when the mine is cleared to the bottom. The second sale is estimated at 10 tons of tin, and the erection of 16 heads of stamps, in addition to the 32 now at work, has been decided on, which, when completed, will greatly facilitate the returning of a proportionate quantity, of which it is reported that there is no limit, of produce.

At ROSEWARNE UNITED very little improvement to notice has taken place since the meeting. They have intersected Rosewarne Consols lode in the 30 cross-cut, at Giesler's shaft, and opened a few fathoms on the lode, which is dry, but not rich. A pitch in back of the 50 has improved, and is reported worth full 40*l.* per fm. —At EAST ROSEWARNE the lode at the shaft is disordered at present, but will, no doubt, resume its previous value. —CARNYORTH is reported to have improved generally, and the recent discovery maintains its character and value for tin. In consequence of the impaired health of the present highly-respected pursuer, Mr. Pearce, the shareholders are likely to be called upon to exercise their right of selecting a successor, and as that gentleman has recommended his son-in-law, Mr. Couch, the secretary of the Royal Cornwall Geological Society, as a person eminently qualified for the office, it behoves the proprietary to assist in his appointments to prevent the mine becoming a "merchants' mine," which has ever been the object of Mr. Pearce to obviate, well knowing that of any succeeded over the company to regular pay-days. The sett is likely to be an excellent speculation, if efficiently managed. —BARRET AND GRILLS continue to hold out more than ordinary promise, the recent discoveries fully maintaining their value and prospects, and returning about the same quantity of tin as the past quarter. —WENDRON CONSOLS is progressing very satisfactorily, possessing now adequate power for pumping the water and stamping their tinstuff. From the extent of ground now opened, and the improved prospects, it is confidently stated that their returns of tin will be increased. —WHEAL PROSPER (Brea): With the exception of an improvement in the 40 east, which is now worth full 28*l.* per fm., the mine throughout looks much the same as last, which is reported by the Trevaunys lode has not yet been intersected.

SITHNEY AND CARNARVAL quarterly account was held on the 18th, when a call of 10s. per share was made, charging everything up close, and leaving a balance of upwards of 20*l.* in favour of the mine. The prospects in the 30 and 50 ends east, on Carnarval lode, are represented as exceedingly good, but, value for tin, the greatest portion of the past quarter has been engaged in removing the materials from Wheal Sithney, and erecting them on Carnarval. —GREAT WHEAL FORTUNE continues to look remarkably well, and no material change has taken place since their general meeting, held about three weeks since. —At GARLANDIA a meeting was held on Tuesday last, when a call of 14s. per share was made. The mine is reported to hold out some promise, although it is looking poor at present.

SOUTH WHEAL LUDCOTT account meeting, recently held, was adjourned for a few weeks, for the purpose of affording time to sink the shaft and to cut the lode, which is expected by that time to be in the bottom of the shaft. It is stated that this arrangement was made to meet the views of a large holder, who desired to have an impediment to regular pay-days. The sett is likely to be an excellent speculation, if efficiently managed. —BARRET AND GRILLS continue to hold out more than ordinary promise, the recent discoveries fully maintaining their value and prospects, and returning about the same quantity of tin as the past quarter. —WENDRON CONSOLS is progressing very satisfactorily, possessing now adequate power for pumping the water and stamping their tinstuff. From the extent of ground now opened, and the improved prospects, it is confidently stated that their returns of tin will be increased. —WHEAL PROSPER (Brea): With the exception of an improvement in the 40 east, which is now worth full 28*l.* per fm., the mine throughout looks much the same as last, which is reported by the Trevaunys lode has not yet been intersected.

From Mr. EDWARD COOKE:—There has not been much recovery from the late depression during the week. As usual, there has been fluctuations in the price of LUDCOTT shares. The public, however, are quietly absorbing these shares at the present ridiculously low quotations, notwithstanding the most extraordinary efforts that are being made to prejudice their minds against the mine. During the past week the share of LUDCOTT has been taken place, realising 497*l.*, the produce of six weeks. Surely this is a convincing proof of the value of the property. No pressure has been put on to raise this quantity; nor has the agent put forward any extravagant reports or statements in the meantime. In fact, his over-caution in reporting has been, I fear, construed into inability on his part to speak favourably of the mine; and, when remonstrated with on the subject, he simply says—"In the midst of so many conflicting reports, I am content to allow the future sales of ore to confirm the opinions I have ever expressed about the merits of Wheal Ludcott, feeling perfectly confident that time will prove that I have not been underserving of the confidence of its shareholders." Besides the rich quality ore in this mine, of which there is undoubtedly a large quantity, it should be understood that the quality of the tin is of the highest, and that the quantity of which sold on Monday last at 34*l.* 2*l.* 6*l.* per ton, while what may be termed the lead portion of the mine is improving. With such a length of unexplored ground, and having the same cross-course traversing it which produces the rich silver-lead, it is not at all unreasonable to suppose that similar deposits will be found in other parts of the mine; besides which, there are other lead lodes in the set of equal promise to those that have already been so productive. Wheal Ludcott, taken for all in all, has not its like in Cornwall, and will, I believe, pay better dividends on the present price of the shares than any other mine in the county. With regard to market operations, I confess that up to the present time the sellers at high prices have had the best of it; still there is such a large number of buyers who have been sold for time delivery, that, causing a depreciation in price, and, judging from the desire to pay 2*l.* 6*l.* per share, and in some instances more, for the loan of them, it shows evident signs of shortness of the stock; and if bona fide buyers should continue to buy at the same rate as they have done lately, there will be some difficulty felt in the delivery of the shares. To buy into a mine that will pay 20 to 25 per cent. on its present price cannot be termed a very bad investment, while the chances of other important discoveries are very great indeed. Having been favoured with the sight of a report given by Capt. Fawcett, for several years the manager of the Almaden Silver and Quicksilver Mines (the richest in the world), I would advise my readers to peruse it, as it is, I presume, the most complete and reliable statement of the present state and future prospects of Wheal Ludcott. CARADON CONSOLS have been in good demand for some time past. These shares are being bought up by parties in the locality of the mine. Great hopes are entertained that the Menadue lode, in this mine, will prove as productive as in the adjoining mine—West Caradon. There are only 914 shares, and well held; price now about 17*l.* to 18*l.* In the event of a slight discovery they would double their price immediately. NORTH CROFTY have been in better demand. The mine has very much improved, and will probably turn out a prize yet. EAST CARN BREA receded at one period to 10*l.*, sellers, on a senseless panic, brought about by a few individuals, whose sole object was to depress the price of the shares, and to cause a depreciation in price, and, judging from the desire to pay 2*l.* 6*l.* per share, and in some instances more, for the loan of them, it shows evident signs of shortness of the stock; and if bona fide buyers should continue to buy at the same rate as they have done lately, there will be some difficulty felt in the delivery of the shares. To buy into a mine that will pay 20 to 25 per cent. on its present price cannot be termed a very bad investment, while the chances of other important discoveries are very great indeed. Having been favoured with the sight of a report given by Capt. 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past month; we intend to communicate with the winze sinking below the 260 for ventilation before we cut out the lode, which we hope to accomplish in about a month from this time. The lode is in the winze sinking below the 260 east the lode is 2 ft. wide, producing good stones of ore, and promising further improvement. The lode is in the winze sinking below the 260, west of Union shaft, the lode is 3 ft. wide, and will yield 3 tons of ore per fm., worth 71. per ton. We have no improvement to notice in the ends on the different lodes since our last monthly report.

FRANK MILLS.—J. P. Nichols, J. Cornish, Aug. 20: The lode in the end of the 84 north has improved since last report, it will now yield from 7 to 8 cwt. of lead ore per fm., and the ground is of a favourable character. In the 72 north, on west branch, the lode is small, and unproductive of lead ore to value. The west lode in the 72 north is large and hard, producing a small quantity of saving work. The 60 north, on west branch, has yielded for the last 4 cwt. driving about 7 cwt. of lead ore per fm. In the 45, south from air-shaft, the lode is at present unproductive of ore to value. The different lodes are yielding about their usual quantities of ore, and the tribute department is looking rather better, more especially a pitch in back of the 60, south of air rise; here the lode will yield from 10 to 12 cwt. per fm., with the ground steady for working.

GARRETT.—W. Sandoe, Aug. 19: The end going west from No. 1 stope looks exceedingly promising; lode 3 ft. wide, producing occasional stones of lead ore, and strongly indicates an improvement. The lode in the east end is just as last reported, 2½ ft. wide, but at present unproductive for lead ore. The end also going west from south shaft is without any change to notice since my last. We are making good progress with clearing up the old shaft westward; we have cleared and secured in the past fortnight about 5 fms. I expect the old shaft to be about 15 fms. deep. We find daily good stones of ore in the rubbish.

GAWTON.—Geo. Rowe, Aug. 16: The lode in the 36 west has not been taken down during the past week. The ground is much improved, and good progress is being made. The lode in the back of this level is worth from 8 to 10 tons of ore per fm. The tribute department is producing its usual quantity of ore. We have on the floors dressed and undressed towards the next sampling about 50 tons of copper ore.

GOGGINAN.—Aug. 19: The lode in the 100 fathoms east of Gilbertson's shaft, is 4 feet wide, containing spar and a little blende, with spots of lead ore at times, but not to value; this end is being pushed on by six men with all possible speed. The lode in the rise over this level, 50 fathoms east of Gilbertson's shaft, is 3 feet wide, producing 6 cwt. of lead ore, and 5 cwt. of copper ore per fm.; the lode in the pitch over the 100 fathoms level, 50 fms. east of Taylor's shaft, is 5 feet wide, yielding 9 cwt. of lead ore per fm. The lode in the pitch over ditto, 60 fms. east of Taylor's shaft, is 3 feet wide, producing 10 cwt. of lead ore per fm. The lode in the pitch over the 80 fm. level, 10 fms. east of Taylor's shaft, is 5 feet wide, producing 12 cwt. of ore per fm. The pitch over the 60, or deep adit level, 10 fathoms east of Gilbertson's shaft, is in a lode 4 feet wide, yielding 14 cwt. of lead ore per fathom. The lode in the 80 fm. level, going west of Bryn Pica shaft, is 5 feet wide, of a kindly appearance, yielding a little ore, and letting out a good deal of water; this point is being pushed on by six men. At level Newydd we are clearing the shallow adit level, west of the cross, in order to rise over that level through the old workings, which will enable us to get down the shaft to the shallow adit quickly; these points will be pushed on as fast as possible. The dressing, &c., with all other things, are going on regularly.

GREAT CARADON.—F. C. Harper, Aug. 16: I am glad to be able to inform you we have an important change in the character of the ground in the shaft, having passed through that hard floor or channel of ground which we have been troubled for so long a time past, it is now being moderately easy, and of a favourable character, somewhat similar to what we had in the 40 fm. level—light-coloured killas, traversed by small veins of moelwyn.

GREAT MOELWYN.—Captains Goble and Griffith, Aug. 21: This week we have had the gratification of observing that the slaty slabs at the underlayers recede from the sillons roof get more and more congenial for splitting, so that after about 6½ fms. of distorted stones get removed the underlayers will turn out satisfactory blocks for roofing purposes. As both cellular and chemical evidences show there are several seams or layers of slate formations of various thicknesses betwixt the trapiferous masses. As a proof of the specific gravity, a few feet under the upper mass, being the great density stated in the last analysis, that in the stones, only about 6½ fathoms from the same roof, gives a much lighter specific gravity, with a crystalline structure far less conchoidal, hence more evenly laminated, and yet there appears but little difference in their outward appearance, or angles of longitudinal fracture, while the natural position in situ of the separate layers, shows the first seam under the trapiferous mass, consequently in irregular angular patches, whereas the next layer exhibits a more regular and parallel stratification. It thus follows, after the distorted, dirty patchwork coverlet, sticking to the iron-bound canopy, is cleanly removed, the contiguous sheets will turn out useful blocks for roofing purposes, while those solid rocks in the upper hand might be profitably squared into suitable slabs when too splintery for separating by the knife into thin plates. In short, the time will come when philosophical investigation of certain rocks for slates will be resorted to as well as analysing stones for metals, since chemical evidences often exhibit results of quality where outward appearances offer no proof of change.

GREAT RETALLACK.—W. H. Reynolds, Aug. 18: The lode in the shaft is composed of spar, prisms, &c., with a mixture of blende, with spots of copper and lead. In the 63 east the lode is spotted with copper, and looks promising. The lode in the 40 fm. level west yields good blende.

GREAT SOUTH TOLGUS.—J. Daw, Aug. 20: The lode in Lyle's shaft is 6 ft. wide, worth 50l. per fm. for tin. In the 112 fm. level west the lode is 1½ ft. wide, producing stones of copper ore, but not enough to value. In the rise in the back of the 90 fathom level west the lode is 1½ ft. wide, producing 1 ton of ore per fathom. No alteration in any other part since last reported.

GREAT TREVEDDOE AND CABILLA.—J. Polglase, Aug. 19: The engine-shaft in Cabilla is now sunk 4 fms. below the 20 fathom level. The shaft is now cut in the bottom of the shaft. The ore gone down in the 20 fathom level, I have no doubt, will be met with in the shaft. The shaft greatly improves the ground for sinking with speed, and we expect an immediate change at this point. On the Treveddoe side of the valley we are stopping the lode in the adit, in order to enlarge the old level so as to reach the shaft, which is now about 2 fms. distant eastward; when this is effected, and the old shaft cleared, we shall be in a position to increase our returns greatly from this point; the lode is large, and produces good work for tin throughout. The slide referred to before may be seen in this adit level; all our workings on this slide have been under the slide, and the lode has been, and continues, productive at every point where worked. We have sampled two small parcels of copper ore this week, and shall again sample tin in a short time. On the whole, I consider our prospects very good.

GREAT WHEAL RUSY UNITED.—G. Richards, J. Peterlick, R. Giles, W. Trelease, Aug. 18: We have taken down the lode in Harvey's engine-shaft; it is now 5 ft. wide, yielding saving work for tin and copper. The lode in the 120, east of Offord's, is small and poor. The lode in the 100, east of Offord's, is 6 ft. wide, worth for tin and copper 40l. per fm. In the 110, driving east of Wasley's winze, the lode is 6 feet wide, worth for tin and copper 25l. per fm. The lode in the 110, driving west of Wasley's winze, is 6 feet wide, worth for tin and copper 30l. per fm. In the 100, east of Offord's, the lode is 100, east of Offord's, the lode is 6 feet wide, worth for tin and copper 25l. per fm. The lode in the 100, east of Offord's, is 5 to 6 feet wide, worth for tin and copper 18l. per fm. In the 110, east of Offord's, the lode is 9 ft. wide, worth for copper and tin 35l. per fathom. The lode in the 100, east and west of Colman's winze, is 6 feet wide, worth 15l. per fathom. In the 100, west of Fielding's, the lode is small and poor. The lode in Matthew's shaft, sinking below the 90, is 3 to 4 feet wide, yielding a little tin. In the winze sinking below the 90, east of Matthews's shaft, the lode is 3 ft. wide—saving work for tin. The ground in the 70 cross-cut, north of King's shaft, is favourable for driving—no lead cut yet. In the 60, driving west of Black Dog shaft, the lode is large, yielding stones of ore. The engine-shaft is now sunk 7 fms. below the 60, and the lode is not yet communicated to the 60, but we are pushing it on with all speed. We have holed Hunter's shaft to the 50 fm. level, and hope, if the ground continues favourable, to communicate it with the 60 about the end of the month. John's shaft is cleared 6 fms. below the 40. The lode in the 50, driving west of Hunter's shaft, is 16 inches wide, worth for copper 5l. per fathom. We are fixing the surface balance-bob at Hunter's shaft, have completed the skip-road to the 30 fm. level, and if all be well we shall have it finished to the 40 by the end of the week. All the other work is progressing as fast as possible.

GREAT WHEAL FORTUNE.—J. Vivian, R. T. Miners, T. George, Aug. 21: Old Mine: The ground in the cross-cut, driving north of Harvey's engine-shaft, at the 90, continues favourable. No change in the 85, east of the lode in the 70, driving east, is worth 8l. per fathom. The lode in the 50 fm. level, is worth 9l. per fathom. North Lode: The lode in the 50, driving east of Blue Burrow shaft, is worth 6l. per fathom. The engine-shaft is sunk 10 fathoms below the 78, and will be completed to the 90 in about six weeks. The lode in the 78, driving east, is 6 ft. wide; stamping work. A great improvement is anticipated shortly, the end now being within 7 fathoms of the winze sinking below the 68, where the lode is worth for its length (10 feet) 170l. per fathom; the winze is now 6½ fathoms below the said level. The lode in the 78, driving west of shaft, is 5 feet wide, producing a little tin. The lode in No. 1 stope, in the back of the 68, is worth 30l. per fathom. The lode in No. 2 stope is worth 25l. per fathom. The lode in No. 3 stope is worth 18l. per fathom. No change in the 68, driving west of Crotch's. The 78, driving east of Hosken's flat-roof shaft, is opening tribute ground. The lode in the same level, driving west, is worth 18l. per fathom. The lode in the stope in back of the 68, west of Hosken's flat-roof shaft, is worth 40l. per fathom. The lode in No. 1 stope, in back of the 68, west of Hosken's flat-roof shaft, is worth 12l. per fathom. The lode in No. 2 stope, in back of this level, is worth 13l. per fathom. The lode in the 48, driving east of Hosken's flat-roof shaft, is 4 feet wide, producing tinstuff of moderate quality. This level will be communicated with the eastern shaft in a few days, when we shall be in a position to discharge more tinstuff from the part of the mine we have sold since the meeting of adventurers about 19 tons of tin. A similar quantity will be ready for the market in eight days.

GREAT WHEAL FURY UNITED.—T. Gill, F. Francis, S. Harris, Aug. 19: Ivey's shaft is sunk about 3 fms. below the 115; the lode within the last 6 ft. in sinking has very much improved in size, it is now over 3 ft. wide, and shows very good indications for minerals. In the 100, driving west of Ivey's shaft, the lode is about 2 ft. wide, and there is a great deal of water flowing from it; the lode and strata look very promising to yield mineral shortly. The 135 is driven west within 6 fms. of Ivey's shaft; the lode is about 3 ft. wide, with a little tin, but not sufficient to value, but the lode still looks promising. In the winze sinking below the 142, west of Metal shaft, the lode is very large and hard; we are carrying about 1 ft. of the north part, which is yielding good stones of tin, and worth 16l. per fm. A rise is set in the back of the 152, west of Metal shaft, for the purpose of ventilation, and to facilitate the working of the ground; the lode is large and hard, and yielding good work for tin; it is worth about 17l. per fm. We expect to communicate this rise with the winze sinking below the 142 in the course of a day or two. In the 152, driving west of Metal shaft, the lode is about 2 ft. wide, and worth 40l. per fm. In the cross-cut driving north-east of Metal shaft, at the 162, we have intersected the north part of the lode, which is yielding good stones of tin, but we have not done sufficient on it to state its value. In the 162, driving east of Metal shaft, the lode is very much improved within the last 6 feet in driving; it has yielded good stones of tin. We expect to cut a cross-course in driving a few feet further than we intersected in the level above; and we expect also to get under the good bunch of tin that is gone down in the bottom of the 152. In the 162, driving west of Metal shaft, the lode has been small and dry for this last 4 or 5 fathoms, but now the end has become much wetter, and we expect that we are coming up under the bunch of tin that we drove through in the 152 for a great many fathoms, and which was worth from 100l. to 150l. per fm. We have commenced to sink Metal shaft below the 162, by twelve men. We have sunk the new shaft on the new south lode, between 16 and 18 fms. below the surface, and have commenced to drive west on the lode, which is 1½ ft. wide, and poor at present, but shows very good indications for improving shortly. Our stopes throughout the mine are looking very well, and worth on average about 35l. per fathom. Our machinery is working very well.

GROSVENOR.—W. Sandoe, Aug. 19: In the 47 yard level, going west from No. 1 shaft, a most favourable looking change has taken place in the ground, from which I conclude we are near to the new Rake lode; the air, however, in this end is now very bad, and the fixing of pipes, &c., to convey air will further our progress for a day or two; but I hope to push this point, so as to be able to speak fully and favourably of it in my next. The 65 yard level, going east from the whin-shaft, is producing lumps of ore, and likely to improve. The lode in the bottom of the lode is yielding good lumps of solid lead ore. We had commenced to cross-cut into the ore ground below the 80, but some of the timber having failed in the bottom part of the whin-shaft rendered it

dangerous to work in the 80 until the shaft was repaired, and this work we are now busily engaged at, and hope to complete the same in a few days. There has no change worthy of notice taken place in any other part of the mine since my last.

GUILLYN.—J. Curtis, W. W. Martyn, J. Rees, Aug. 20: Riche's Lode: In the 40, west of cross-cut, we are rising to communicate with the 30 fm. level for ventilation, which, when completed, will be a good tribute ground. In the 30 cross-cut, south of the engine-shaft, we have cut the lode referred to in our last report, which is 1 foot wide, and worth for tin 10l. per fm.; we have set to drive on it, east and west, at 3l. per fm. This is a most important discovery, as it is entirely in whole ground; we shall now commence a cross-cut in the 40. In the 20, west of Riche's shaft, the lode is 2 feet wide, worth for tin and copper 6l. per fm. The pitches behind this end are looking well, and are all in whole ground to surface. Wheel Fox: In the 30 east end the lode is 2 ft. wide, worth for tin 10l. per fm., and we are daily expecting to meet with the course of copper gone down from the level above. In the 30 east end the lode is 2½ feet wide, worth for copper from 12l. to 15l. per fathom; these ends are being driven at 40l. per fm. In the 20 east end the lode is 2 feet wide, worth for tin 30l. per fathom; price for driving 1l. 15s. per fm.; this end is 40 fms. in advance of the 30, throughout which driving the lode has been highly productive. In the 20 cross-cut south we have cut Riche's lode, which is worth for tin 6l. per fm.; price for driving 20s. per fm. We are sinking a shaft on this lode from surface, which is about 14 fms., where the lode is 1½ ft. wide, and worth for tin 8l. per fm.; price for sinking 40s. per fm. Our copper sampling will be on Tuesday next, when we shall not have less than 80 tons. From the above report it will be seen that the mine is looking much better than it ever has before, and there appears every prospect of its continuing to improve.

HARK REEVE.—Capt. Harpur and Metherell, Aug. 14: We have no material change to communicate to-day in the appearance or character of any part of the mine. The ground in the cross-cut in the 53 east is moderately easy for driving. In the 41 east the lode continues to present very favourable indications for improvement, composed of peach, mundle, and ore, worth of the latter 1 ton, or 4l. per fm. The lode in the stopes in bottom of the 41 west is about 4 ft. wide, composed of ore and mundle, worth of the former 2 tons, or 12l. per fm. In the rise above the back of the 41 the lode is from 2 to 3 ft. wide, composed of quartz, mundle, and ore, worth of the latter 2 tons, or 8l. per fm. The lode in the 30 east is much the same, consisting of killas, peach, mundle, and ore, worth of the latter 2 tons, or 6l. per fm. In the rise above the back of this level the lode is composed of mundle and ore, worth of the latter 6 tons, or 18l. per fm. The tribute department is yielding much as usual. The ground in the new eastern shaft is favourable for progress.

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The early crops from the late sowing have already begun to spring up, and owing to the unusually abundant rains with which we have lately been favoured, they should be abundant. Owing to the same cause the sowing in the south has not as yet been effected, and the roads being rendered impassable no grain can be transported from the interior to the coast. All this may, I trust, combine to obtain a fair market for our produce, and for the large stock which has lain so long on hand; the first effects of the pressure have been felt in the flour, which has risen 3s 6d. per sack. The cattle business continues to show good results.

LAGUNA (silver).—J. R. Rule, June 27: I have been over to El Chico during the past week, and have made some measurements, and set some men to work, with a view to prepare the place for the wheel, which I find can be done at a small expense. In the first place a wheel of about 20 or 22 ft. diameter, and 6 ft. breast, with one set of buckets, can be advantageously employed to draw water and stuff to the depth of about 100 yards, after which, if the mine warrants it, another wheel, of about 35 ft. diameter, might be put in below the first, 4½ ft. breast, with one set of buckets, to draw water only, with pumps, &c., in which case the second wheel would have all the water of the first, and working under the most favourable circumstances, would probably be sufficient to drain the mine to a depth of 300 yards, which, as it would be more than 200 yards beyond the present depth of Aravalo Mine, would make trial of a great extent of ground; and if we are so fortunate as to meet with one of those bunches of rich ore, which have given such large profits in that mine, the Laguna concern will quickly pay its costs, and become profitable also. But seeing the great width of the vein, interspersed with good argenteous ore, I think there is every probability that the outlay required here will not be great, as almost from the commencement of working some ore will be raised, and it may reasonably be expected that these will increase as the shaft and levels are extended in depth and eastward.

WEST CANADA.—Capt. Plummer, Aug. 4: Copper Bay: The lode in the 10, going west of the new engine-shaft, is to all appearance improving; the lode has become more productive. The 20, west of the same shaft, is poor; the lode of late has been much disturbed and broken into branches. It is not proving to be so rich for copper ore as the level above. The same level, going east, is much more productive, yielding some 2 to 2½ tons of ore per fathom. The stope, east and west of Palmer's, continues without change, and good progress is being made at each. The stope over the 10, east of Palmer's "fire lode," yields 3 tons per fathom. The lode in the level east of this is, we think, improving. It has been very poor, but appearances are favourable for improvement. The 20, east of Bray's, is without change, and good progress is being made in driving. The stope west of Jennings' shaft yields 3 tons of copper ore per fathom, with a fair prospect for its continuance. We have holed and completed the new shaft on the "fire lode," and have set the stope to four men; the lode will yield about 2 tons per fathom. Wellington Mine: The lode in the level going east of Grenfell's shaft yields 1 to 1½ tons per fathom; it looks promising. The stope east of the shaft is yielding 2 tons, and the stope west 2½ to 3 tons per fathom. The 20, west of Bray's, yields 3 tons per fathom. The stope and tribute pitches on the Wellington, other than those mentioned, are without change. During the past month we dressed about 230 tons of copper ore of the usual percentage, and on the 2d inst. we shipped 1050 barrels ore. Our summer has been remarkably dry; we have scarcely had any rain for several months, and fires have prevailed around us in every direction, and in many places it has consumed not only the wood but the soil, as well as laying open the bare rock to some considerable extent. We have taken advantage of this to search for fresh or new veins, and have been successful in finding what we hope will be a tolerably good vein of copper ore. The discovery has only been made recently, and we have had no chance as yet of proving it, but it is opening out better than we first expected to find it.

PONTGIBAUD.—Wm. H. Rickard, Aug. 16: Roure: The 80, south of Rickard's shaft, has entered soft ground, not productive; the same level, north of shaft, is in a very rich lode, 6 feet wide, 2 feet of which is saving work. The 60, north of Rickard's, produces stones of ore; we have intersected Emily's lode in this level by a cross-cut, about 40 metres long. The 40, south of Agnes', is easier for driving, and yielding a little more ore than when last reported. The 20 south yields ¾ ton of ore per fathom. The add level, south of Agnes', yields 2½ tons of ore per fathom. The stope continues to open on ground on part of the lode driven; the lode where being undercut behind the end is yielding good work. No. 1 winze, sinking below the 40, north of Agnes', yields ½ ton of ore per fathom. No. 1 winze, sinking below the 20, south of Rickard's shaft, will be holed to the 40 in a few days, laying open good stope ground. Our stope in this mine yield well. The tribute pitches are just as when last reported. Roure: The 110, driving north of Little St. Joseph's, produces stones of ore. The 85, on Grand Marched lode, is without any alteration to mention. We hope to hole the rise in the back of the 85 to a winze sinking in the bottom of the 60 by the end of the month. La Grange: We have resumed the driving of the cross-cut at the 20, west of Noky's shaft, which has entered the lode a distance of 2 ft. in ore ground. Mitoche: The 80 south, on No. 3 lode, is the same in value as when last reported, ¾ of a ton per fathom; the same level, north of No. 2 lode, is improved in appearance, yielding 1 ton of ore per fathom. The 60 south is poor. The winze sinking below the 60, north of shaft, on No. 3 lode, yields saving work; the winze sinking below the same level, on No. 2 lode, opens stope ground. The add, east and west of No. 7 lode, on Noky's lode, opens stope ground. It is both ore. The add, south of the add, is without change to notice. Our tribute pitches in this mine are much the same in value altogether as when last reported. Barbette: The add, north of cross-cut, on No. 3 lode, at Brod, yields ¾ of a ton of copper ore per fathom; the rise in back of the same level, on No. 5 lode, is unproductive. Pranal: The 90, north and south of cross-cut, south of Bontoux shaft, opens tribute ground. The 70 metre level, north of junction, gives out much water; the lode yields blende, spotted with ore. The 30 metre level, north of Gellie's winze, yields stones of ore. The 8 metre level north yields ¾ ton of ore per fathom. The rise in the back of the 70 metre level north gives ¾ ton per fathom. The winze sinking in the bottom of the 8 metre level, north of cross-cut, produces ¾ ton of ore per fathom. Our stope, four in number, are looking better than for some time past. Surface: Our lavatories have suffered for want of a good supply of water during the beginning of this month. Our hands are come back, and all other things going on to our satisfaction.

HINDOSTAN (SINGHBOOM) COPPER COMPANY.—Extract from a letter dated July 5, from the company's manager in India:—The water-wheel is now nearly ready, and on receipt of the cast-iron bearings of the shaft from Calcutta we shall, in about a fortnight, I hope, get one smelting furnace fairly at work. I am happy to say that Capt. Rogers has struck a very good lode of copper in the Lando Mine, No. 3 winze, and I am very pleased with its indications. I went down the shaft this morning, and we are turning out, as near as we can judge, about 100 maunds per month, and this ore I feel confident will return us from 15 to 20 per cent. It was only yesterday that I was able to get out the company's property, and I rode over the whole of the ground over which the works are spread; and so far as I have seen, everything is going on in a highly satisfactory manner, and the company's staff seem very zealous in performing their duties. Such a rapid glance, of course, renders an opinion of mine of little value at the present moment, but in my next I hope to forward the company a very favourable report of our prospects.

CLUNES (Australia).—During the month of May the Clunes Quartz Mining Company have held their half-yearly meeting. The valuable report of the manager, which has already appeared in the Journal, renders but a slight notice of this company necessary. The sinking of the main shaft has been impeded by a great influx of water, started to proceed from the old alluvial ground. The shaft work is not in the least damaged thereby, but the force of the water, falling something like 170 feet upon the men, has stopped further sinking *pro tem*. The water is being collected by shafts, or pipes, which will convey it to the bottom of the shaft, from whence it will be dealt with by the powerful pumping gear. A dividend of 9½ per share was paid last Saturday, and a larger one is confidently expected next pay-day. The mine is said never to have looked so well as at present. Shares are selling at 350½, having increased 100½ in a short time; they are expected to figure still higher in a few months, as but little dead work is required to be done—hence they look for extra profits. The new tramway to convey the large blocks of quartz to the hydraulic stone-breaking machine is completed, and the machine has been at work. It has, however, latterly been disused, pending the fixing of a new shaft, and the material after it has been operated upon. The Port Phillip Gold Mining Company for this month make a return for six weeks. The quantity crushed was 4248 tons, yielding 3428 ozs. 12 dwts., average per ton 16 dwts. 3 grs. The works are doing well. There are some additional experiments in progress, to which I may at a future period be permitted to refer.

WEATHER PREDICTIONS.

TO THE EDITOR OF THE MINING JOURNAL.

SIR,—In my letter in the Journal of March 15 I announced the approach of a comet, and that it would be discovered in about a month from that date. Up to July 3 no comet was discovered. The article on the comets, in the *London Review*, of Aug. 9, now fully corroborates my prediction. The perihelion passage of the comet, seen by M. Tempel, on July 8, in the constellation of Cassiopeia, was on June 21; consequently, this comet ought to have been seen at our public observatories about the end of April—about the time I stated in my letter of the above date.

In my letter of June 12 I stated a second comet was approaching the sun; that comet is now visible in the heavens. These facts now corroborate my assertion that I have successfully predicted the approach of five comets, all of which have been discovered, and are now a matter of history.

With reference to the weather: in last week's Journal I stated the weather would be fine from about the 17th to the 21st; on the 18th fine weather commenced; on the 21st rains. For the future, to all appearance, the weather will be more or less changeable to about the 27th, with some local thunderstorms. After that date generally fine weather for some time. In the *Mining Journal*, for the last 18 months, I have given the public the general character of the weather to be expected for each month and week during that time with an accuracy never before attained in the history of astronomical science, which has, to some extent, repaid me for the time and great labour it has necessitated. I shall now leave the subject to the care of others for a fortnight, and I hope the farmers will make the best use of their time to collect their crops, and I wish them all success. I have been informed that my weather predictions have, to a great extent, put a stop to the betting on the "hop duty." If so, I feel very grateful for such a result.

G. SHEPHERD, C.E.,
26, Throgmorton-street, Aug. 21. Author of "The Climate of England."

EMIGRATION.—The Australian colonies have at no period since 1857 attracted the attention of intending emigrants as fields for the profitable investment of capital and labour as during the past and present month. Enquiries for first-class ships, as conveyances to these rich dependencies of the British Crown, are literally without end; and the remarkable exodus from all parts of the United Kingdom through the port of Liverpool, is a striking proof of the liberal accommodation afforded to passengers by Liverpool shipowners. We perceive the renowned clipper fleet now traversing every sea, and the famous pioneer of the clipper fleets now traversing every sea, we hail her periodical departure as an event not to be silently passed over. She has made the passage from England to Melbourne in sixty-three days, and the round from Liverpool to Melbourne and back, including detention abroad, in five months and ten days. We notice, also, that Messrs. H. T. Wilson and Chambers have some of the finest and fastest clipper ships in the White Star fleet on the berth for Australia and New Zealand Oct. 1; Blenheim, for Melbourne and Auckland, Oct. 2; Morning Light, for Melbourne, Nov. 20—clippers of world-wide reputation, and worthy of inspection by all classes of intending emigrants—forming a list of ships which for popularity, speed, and accommodation, could not be surpassed at any port in the world.

The Mining Market; Prices of Metals, Ores, &c.

METAL MARKET—LONDON, Aug. 22, 1862.

COPPER.		£ s. d.	SILVER.		Per lb.
Best selected.....	p. ton	96 0 0	Sheets.....	104-114.	
Tough cake.....	"	93 0 0	Wire.....	9½d.-9¾d.	
Tile.....	"	93 0 0	Tubes.....	11½d.-12¾d.	
Burna Barre.....	"	93 0 0	FOREIGN STEEL.		
Coploap.....	"	—	Swedish, in kegs (rolled) 16 0 0		
Copper wire.....	p. lb.	0 1 0	Do (hammered) 15 0 0-16 0 0		
ditto tubes.....	"	0 1 0 10½	Do, in fagots.....	13 0 0-19 10 0	
Sheeting & bolts.....	"	0 0 10½	English, spring.....	13 0 0-23 0 0	
Bottoms.....	"	0 0 11½	Bessemer's Engineers Tool.....	0 0	
Old (Exchange).....	"	0 0 9	Spindle.....	30 0 0	
IRON.			QUICKSILVER.....	7 0 0 p. bottle	
Bars, Welsh, in London.....	6 0 0-6 10 0		SPELTHER.		
Do, to arrive.....	6 0 0		Foreign.....	17 15 0-18 5 0	
Nail rods.....	7 0 0		To arrive.....	18 0 0	
Stafford, in London.....	7 5 0-7 10 0		SING.		
Bars.....	7 5 0-8 0 0		In sheets.....	33 10 0	
Hoops.....	8 5 0-8 10 0		TIN.		
Sheet, single.....	9 0 0-9 10 0		English, blocks.....	111 0 0	
Pig, No. 1, in Wales.....	4 0 0-4 5 0		Do, Bars (in barrels).....	112 0 0	
Refined metal, ditto.....	4 0 0-4 5 0		Do, refined.....	116 0 0	
Bars, common, ditto.....	5 0 0		Banca.....	114 0 0	
Do, merchant, in Tees.....	6 10 0		Straits.....	111 0 0-112 0 0	
Do, railway, in Wales.....	5 15 0		TIN-PLATES.		
Do, Swed., in London.....	11 10 0-12 0 0		IC Charcoal, 1st qua. p. bx. 1 7 6-1 8 6		
To arrive.....	11 0 0-11 5 0		IX Ditto 1st quality.....	1 13 6-1 14 6	
Pig, No. 1, in Clyde.....	2 12 0-2 16 0		IX Ditto 2d quality.....	1 4 0-1 6 0	
Do, f.o.b. in Tees.....	—		IX Ditto 3d quality.....	1 10 0-1 12 6	
Do, f.o.b. in Tees.....	—		IX Coke.....	1 2 0-1 3 0	
Staffordshire Forge Pig.....	3 10 0-3 12 6		Do.....	1 8 0-1 9 0	
Welsh Forge Pig.....	—		Canada plates.....	12 10 0-13 0 0	
LEAD.			In London; 20s. less at the works.		
English Pig.....	19 15 0-21 10 0		Yellow Metal Sheathing.....	p. lb. 8½d.-8¾d.	
Ditto sheet.....	21 0 0-21 5 0		Sheets.....	p. lb. 8d.	
Ditto rod.....	22 0 0		Indian Charcoal Pigs.....	6 12 6-6 15 0	
Ditto white.....	28 10 0-30 0 0		In London.....	—	
Ditto patent shot.....	22 10 0		At the works, 1s. to 1s. 6d. per box less.		
Spanish.....	19 0 0				

REMARKS.—Our market continues generally in a very inactive condition; the business doing is principally confined to the execution of orders given out by merchants for shipments to India and the Continent. The home trade is extremely dull, and sellers find considerable difficulty in inducing consumers to make purchases beyond their immediate requirements. It is, however, considered by many that they have about reached their minimum, and that any appearance of animation would cause a rapid advance in current rates.

COPPER.—Manufactured remains without alteration in fixed rates. For some time past there have been orders in the market limited to 10d., but without being taken by makers, they having refused hitherto to make contracts below 10½d.; and now the market is again firmer, and a large business having been done to-day at full price—10½d., which is now generally demanded by sellers. Cake and ingot is in fair request; some few parcels have been offered at 92½ during the week. Foreign is in improved demand; Barra Barra is now very strongly held for 95½, and upwards; Kapunda, 94½ to 95½.

YELLOW METAL. rather more in request, at 7½d.; sellers ask 8d. for braziers sheets; 8½d. sheathing.

IRON.—Railway bars are firm at the advanced price, makers for the most part being well supplied with orders. Merchant bars are in good ordinary request, and higher in price; now quoted 5½s. to 5½s. 7s. 6d. at the works, and 6½s. delivered f.o.b. in London. Staffordshire descriptions have greatly improved in demand. Makers of first qualities now ask full list prices. Swedish bars are in very limited supply, and exhibit rather an advancing tendency; quoted 11½s. 10s., ex ship, for good specifications. Scotch pigs have been rather dropping during the week; mixed numbers quoted about 6d. lower—viz., 55s.

SPELTHER.—The spelter market is dull, and prices remain unaltered, at 17½s. to 18s.

LEAD.—English pig can now be bought freely at 19½s. to 19½s. 15s. for ordinary soft quality, and 21½s. 10s. WB; enquiry very sluggish. Pipe, shot, and sheet soft of sale at quotations. Spanish pig, 19½.

TIN.—English has been a little more asked for since the decline; there are sellers at about 20s. below fixed rates. In foreign, Banca is quiet; fine Straits slightly improved, now quoted 11½s., at which price business reported. STEEL without alteration, and in fair request.

GLASGOW, AUG. 21.—Our market has been very animated, as high as 55s. 6d. cash having been paid for warrants. Since then the price has given way to 54s. 3d., rallying again to 55s., at which we close quietly, rather sellers. The furnaces put out of blast, owing to the strike, will be in blast again in a day or two, some arrangement having been made for allowing the "locked-out" men to return to their work. The shipments for the week were:—

Foreign.....	Tons 6964	= 12,847 tons.
Coastwise.....	5883	
Foreign.....	4874	= 10,237 tons in same week of 1861.
Coastwise.....	5363	

ANDREW WOODROW AND SON.

Who shall decide when doctors disagree? How often have we found, that out of half-a-dozen learned and scientific men, who have devoted their time to the study of mental diseases, three of them will show, seemingly by the clearest evidence, that a man is mad, and the other three, also, by what seems equally clear arguments, prove that he is sane! And when a Chancellor of the Exchequer rises in his place in Parliament, and brings out his budget or his estimate of expenditure and receipts for the future, he will prove that his calculations are the soundest, and his plans the best that could possibly be adopted; and when he tells of what he expects to get from some newly discovered tax-producing lode, he will be applauded of course, and have a host of firm believers and supporters. And then an ex-Chancellor will get up, and declare that what the House had just heard was a tissue, not only of unsound calculations, but of absurd deductions, and he will show, in clear and forcible language, that the budget is a deception and a sham. And to this side of the question, also, there will be firm supporters and adherents; and the battle will wax warm between the "ins" and the "outs" ("bulls" and "bears" in another sense), and the only thing certain will be that the people will have to pay their taxes, and what calculations may be right, and which wrong, will only be proved to satisfaction when they have been sufficiently tested. And if among these learned, practical, and scientific bodies such differences of opinion can and do exist, we must not, perhaps, be surprised in a case so peculiarly open to differences of opinion, that the columns of the *Mining Journal* contain, week after week, the most contradictory statements imaginable upon the merits of the silver lode at Wheal Ladocott. We find well-known practical men arrayed in opposition to each other, and giving strong opinions on both sides of the question, and the partisans on either side, or the "bulls" and "bears," carry on the war with no little acrimony and ill-feeling. With some the mine is a fountain of wealth, with others it is a worthless scheme, and to many, we fear, it has proved what we feared it might on its first discovery—"an ignis fatuus, that bewitches and leads men into pools and ditches." Our caution in the first instance was scarcely regarded, and the shares rose to 25½; and while we have since declined to express an opinion upon the value of the mine, we have strongly condemned the means taken to depress and stigmatise it for mere market operations. That shares went beyond their value in the first excitement no one can doubt; but if the mine be as its manager wrote to us on the 7th, and upon which we remarked at the time, those who caused the shares to rise by their purchases, and then created the panic by selling "bears" of large numbers of them, and then used every means to knock them down, should now, at least, allow the mine to stand upon its own merits, for where such differences of opinion exist, time only can apply the true test of its value.

During the week the *MINING SHARE MARKET* has been rather quiet, and void of any speculating excitement, even in the of late, fluctuating stocks. There are more enquiries for such steady investments as Devon Consols, South Caradon, Wheal Seton, East Caradon, Providence Mines, Wheal Margaret, Marke Valley, West Seton, Trelawny, &c. And among progressive mines there has been large orders for East Grenville and Grenville, and a good business done in North Crofty, East Rosewarne, Unity, Wheal Kitty (St. Agnes), Bottle Hill, North Downs, and others. East Caradon shares rose suddenly, soon after our last, to 48, from which it was surmised that the lode had been cut in the 70 ft. level, which was not the case. The shares gave way early in the week to 46½, 47, but leave off 47 to 48; the latest report shows no material change in any of the ends,

but the ground in the 70 cross-cut is still very favourable for ore, and is probable the lode may be cut before Monday or Tuesday next; and this is a point to which expectation has been directed for many months; and upon which a rise or fall of 20,000, may depend, we would remark that when the lode was cut in the 60 it was much poorer than it was when first intersected in the 50, but on driving a few feet it improved to 120 per fm.; it is just possible, therefore, that it may not be cut rich at 70, but this should not lead holders to sell without consideration, as it may greatly improve in a few feet driving. If cut worth 20½ per fm., and of ore this week realised 2969½ 17s. 6d., and go beyond it if cut richer. The Marke Valley shares have been pretty quiet, and moderately dealt in, 10½ to 10½; the ore realised on Thursday 1794½ 8s. 6d. East Caradon shares declined early in the week to 10, sellers, then rose to 11½, and after a fluctuating business, leave off 10½ to 11. The report to which we refer here, at least (as there is no silver in the question), may soon be set at rest, and there should be a disinterested report for the meeting. Wheal Unity, 4½ to 4½; at the meeting the accounts showed a balance in hand of 197½ 8s. 9d., and a call of 4s. per share was made; the report considered the prospects very encouraging. The flat-rod shaft is down 4 fms. below the 66, and worth 20½ per fathom for tin. Wheal Seton shares have advanced to 142½, 147½. Providence Mines shares in demand at 40 to 40½.

Wheal Margaret, buyers at 42 to 43, and scarce. Wheal Ladocott shares opened on Monday at 10½ to 11; and on Tuesday declined from 10½, buyers to 9½, 10; Wednesday, 9½, and have since kept pretty quiet, leaving 9½ to 10; there has been a great scarcity of stock for delivery, and a price offered for the loan of shares, showing to what an extent they have been "beared." The sale of silver realised over 3200½, and with a lead, made the sale 4800½, or 300½ more than we estimated last week. Wheal Grenville, 5½ to 6, and in demand; at the meeting the accounts showed balance of liabilities over assets of 227½ 10s. 2d., and a call of 10 per share was made. The report, which was favourable, leads to the expectation of greatly increased returns, as well as a profit on the quarter's working. An important point, also, which would have proved some weeks ago but for the interruption of a "slide"—that is, cutting the cauter lode in the 80—will be decided in another 6 feet driven, and as the agent is confident of meeting with a good lode, it will greatly enhance the value of the property. East Grenville, 5½s. to 5½s., and great demand; one or two good points are soon expected to come off the especially the cutting the Grenville lode. Wheal Unity, 6½ to 7½; Wheal Grylls, 23½ to 24½; East Grylls, 1½ to 2½. North Crofty shares in request at 3½ to 4; they were rather flatter early in the week, but rose again; the 150 end has improved to 40½ per fm. North Downs shares have been flat at 3 to 3½. North Phoenix, 5½ to 6. Prosper United, 3 to 3½; the lode in Louisa shaft is 6 ft. wide, and worth for length of 10 tons of copper ore per fm.; the winze below the 50 is worth 15½ per fathom; the 50 west is worth 30½ per fm. Carn Camborne, 1½ to 1½. Clifford Amalgamated, 23 to 24, ex dividend; Cook's Kitchen, 27 to 27½. Wheal Trelawny, 16½ to 16½; the lead sold (65 tons) realised 26½ 12s. 6d. per ton. Devon Great Consols, 440 to 460; Drake Walls, 19s. to 21s. East Basset, 46 to 48. Bottle Hill, 10s. to 12s. 6d., and more enquiry for; the sale of tin this month realised 322½ 9s. 9d.; Robert's lode is now 15½ per fm., and in about a month will be intersected east of the cross-course; and as whenever the same cross-course has intersected other good tin has been found, a discovery is looked for here. East Rosewarne 2½ to 2½; Grambler and St. Aubyn, 16 to 17; Great South Tolgus, 4 to 4; Great Wheal Fortune, 26 to 27; Herodfoot, 42 to 43; New Seton 90 to 100; North Basset, 3½ to 4½; North Roskear, 27 to 24. North Treasker shares have been more dealt in, and leave off 23 to 28. Pen-an-drea, 12s. 6d. to 15s.; Pendene, 3½ to 4; Rosewall Hill and Rance United, 44 to 44; Rosewarne United, 10½ to 11½; South Caradon, 340 to 350; South Caradon Wheal Hooper, 19s. to 20s.; South Frances, 100 to 102½; South Tolgus, 35 to 40; Stray Park, 30 to 32; Tincroft, 10½ to 10½; West Caradon shares not so firm, at 30 to 32½; West Seton, 235 to 245; Wheal Basset, 85 to 87½; Wheal Kitty (Lelant), 10 to 11; Wheal Mary Ann, 15 to 17; Wheal Unity, 16s. to 18s.; Tamar Consols, 19s. 21s.

On the Stock Exchange there has been very little business transacted in Mining Shares during the week. The following prices were official recorded in British Mining Shares:—East Caradon, 12½, 11½, 10½, 11½, 11½; Wheal Ladocott, 10½, 9½, 9½, 10; East Caradon, 43, 43½, 47½, 3½. In Colonial Mining shares the prices were:—Bon Accord, 4½, Great Northern of South Australia, ½; Kapunda, 1½; Port Phillip, 1½; Scottish Australian, 1½, 1½; Yundnamutana, 2½; Don Mountain, 1. In Foreign Mining Shares the prices were:—St. John del Rey, 56½, 56½; United Mexican, 7, 7½, 7½; East del Rey, 1½.

The closing quotations for shares in new undertakings were:—Bank Hindostan, 1, ½; Northern Railway of Buenos Ayres, par, ½; Buenos Ayres Southern Railway, ½; Bank of Queensland, 1, ½; London, Buenos Ayres, and River Plate Bank, ½; London and Middlesex Bank, par; General Rolling Stock, ½; London Park, ½ to ½; Metropolitan Wagon, 1, ½; London actions were also reported in Parkgwyn, par to ½; Quebrada, 1 ½. The share list of the London, Buenos Ayres, and River Plate Bank will be closed on Thursday.

The prospectus of another gold company—the Dolfrwynog Mining Company—has just been issued, Messrs. Charles Heneghe, Thos. Holroyd, Robert Kenyon, H. A. Sandford, and F. Wynnam, composing the board of direction. The capital has been fixed at 20,000½, in shares of 1½ each, and the property is described as possessing all the elements of success. The Dolfrwynog Mines are situated in the parish of Llanfachreth, about six miles from Dolgelly, and to the west of the River Afon Wen. The property extends over 170 acres of land, and comprises the sets of Dolfrwynog, Tynsionail, Bwlch-rhoswen, and Rhoswen, which are held of tack-note, convertible into lease for twenty-one years, at 25½ rent, merging into a royalty of 1-15th. The strata are precisely those pointed out by Sir Roderick Murchison as "the most useful position for gold," and Mr. T. A. Readwin, from whom no one has had greater experience of Merionethshire, states by "far the richest discoveries of gold have been made at the Dolfrwynog, Prince of Wales, and Clogau Mines. I have extracted gold from each of these mines at the rate of 300 to 400 ozs. per ton." The vendors are to receive for the transfer of the property, upon which a large amount has been expended, 1000½ in cash, 4500½ in paid-up shares, and a further 4500½ in paid-up shares after the first dividend has been paid. There are four distinct lodes, mostly presenting promising copper indications, running through the set now to be worked. Gold is traced; and in one lode, called the great gold lode, on which two shafts have been sunk to the depth of 30 fathoms, and levels driven along for like distance, specimens of great value and beauty have been produced. The gold is visible to the naked eye in some specimens, and upwards of 3 ozs. to the ton has been obtained from ore containing no visible gold. It will be seen, upon reference to another column, that the property of the Atlas Tin and Smelting Company is in course of vigorous development, and presents satisfactory indications. The directors have available themselves of the power accorded in the prospectus of adding 25 per cent. in shares upon any such number of the unissued shares as may be taken up by parties other than proprietors in the late company.

The directors of the Don Pedro North del Rey Mining Company have announced a fresh issue of shares, for the purpose of enabling them to complete the purchase of a property in addition to that which formed the original basis of the company. This additional property has been minutely inspected by Captain Thomas Treloar, who has obtained the chief information as a Brazilian miner, from having been for some years the chief agent in a district which Captain Treloar believes to be capable of producing more gold than any other locality in all that can be desired, and position as regards labour and provisions is all that can be desired, and all of which have yielded large quantities of ore. According to the first made by Captain Treloar, it appears that this property will, for the first year, cost for working 8500½, and the produce 9971½; for the second year the cost will be 12,924½, and the produce 19,942½; and for the third year the cost will be 14,930½, and the produce will amount to 29,912½. This estimate, which is based upon results the property has already produced upon a limited scale of operations, and with imperfect machinery, is not extended beyond three years, for the reason that at the end of that period of exploration and new machinery, and that at the end of that period

[illegible]

MINERAL OILS.—Every day demonstrates more and more clearly that the county of Linlithgow is the head-quarters of the mineral oils in Great Britain. The large establishment at Bathgate for the manufacture of oil from the Torbanehill mineral is well known, and last week the extensive works belonging to the Broxburn Shale Oil Company commenced distilling oil from the rich shale found in this locality. It may also be mentioned that the Broxburn Shale Oil Company was formed under the Joint-Stock Companies Acts at Glasgow a few months since, and already the company have secured a large amount of business, and are expected to be successful. In a short time the number of reports on this receipt will be multiplied if not quadrupled.

Copper Ores for sale at Swansea, August 26.—Cuba 95, 87, 83, 82, 78, 6, 55, 50, 42, 5, 67, 28—Cobre 92, 89, 88, 67, 66, 14, 13, 12, 11, 6—Knockmahon 98, 88, 33, 96,—Berehaven 100, 63, 86—Laxey 83, 15—Del Soto 49, 46, 1—Seville 60, 1—Lochwinnoch 25—

Karrington 4—Total, 1974 tons.

THE ANNUAL RETROSPECT OF ENGINEERING AND ARCHITECTURE.

A RECORD OF PROGRESS IN THE SCIENCES OF CIVIL, MILITARY, AND NAVAL CONSTRUCTION.

VOL. I., JANUARY TO DECEMBER, 1861.

Edited by GEORGE R. BURNELL, C.E., F.G.S., F.S.A.

It is believed that an annual review of our progress in the Sciences of Construction is a work the want of which has long been felt by professional men. No doubt there are already in existence publications which to a certain extent discharge this function; but the dates of their publication are so near to the discoveries they record, that they necessarily bear, more or less, an ephemeral character, on account of the prominence which must be given to the topics of the day. An annual review of the state of an art or science is to a certain extent removed from this danger, and should present the most important results of the year's labours in a more concise and more carefully arranged form. It is proposed, by the publication of the "Retrospect of Engineering and Architecture," to supply the want of a Review such as has been described.

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The late company expended several thousand pounds in proving these lodes. At the present shallow depth of the workings, monthly sales of tin have, during this year, been effected; and the prices realized prove it to be of high quality. It is, therefore, confidently believed that at a greater depth (with a comparatively small additional outlay) these lodes will in a few months pay large and continuous dividends. This belief is fully borne out by the reports of Capt. Chas. Thomas, of Dolcoath Tin Mine (corroborated by other mining captains), and Captain John Warren, who has had the superintendence of the whole of the works from their commencement, and in whose judgment and ability Captain Thomas has expressed the greatest confidence. Copies of Capt. Charles Thomas's report can be obtained at the company's offices.

It is an important feature that this mine has more than paid its cost during the present year.

Prospectuses and reports, as advertised in the MINING JOURNAL of the 19th ult., can be had at the offices of the company, and application for the remaining shares must be made in the following form:—

To the Directors of the Atlas Mining and Smelting Company (Limited), No. 7, George-yard, Lombard-street, London, E.C.

GENTLEMEN.—Having paid into the hands of the City Bank the sum of £ to your credit, I request you will allot me shares of £1 sterling each in the above-named company, and I agree to accept such shares, or any less number that may be allotted to me.

Name and surname in full.....

Address in full.....

THE ATLAS MINING AND SMELTING COMPANY (LIMITED).

Notice is hereby given, that the Directors are PREPARED TO RECEIVE APPLICATIONS for the remaining SHARES in this company from other than original shareholders, and to the allotments made a bonus of 25 per cent. in shares will be added: that applications, however, must be made to me on or before the 15th proximo.

7, George-yard, Lombard-street, London, E.C. GEORGE F. GOODMAN, Sec.

Notices to Correspondents.

PROVINCIAL BROKERS.—We have repeated enquiries for a list of agents in the provinces to whom communications may be addressed from existing or contemplated companies, for business purposes. Those gentlemen who may be desirous of having their names given to secretaries or projectors will, perhaps, be kind enough to forward an intimation to that effect.

THE GLAN-T-PWLL SLATE COMPANY.—Will anyone interested oblige by forwarding the particulars of the legal proceedings in which this company has been recently engaged? That the result has been adverse, I fear, is too true; but that the consequences are so serious as stated, I cannot believe. The officials would, however, do well to keep the shareholders fully informed, to prevent unnecessary alarm. In the locality, the friends of Mrs. Oakeley are very jubilant, and represent our proceedings as not only unbusiness-like, but unworthy.—T. FRASER: Liverpool, Aug. 20

NORTH CANADIAN.—The letter has been received, and shall be attended to.

WARWICKSHIRE COAL.—T. P. (Wolverhampton).—We are not aware of Warwickshire steam-coal being sold in London to any extent, though it is probable a market might be found, if the price were such as to induce trial to be made of it.

MINING EXCHANGE.—The communication should have been addressed to the Chairman.

* With this week's JOURNAL we give a SUPPLEMENTAL SHEET, containing articles on Mining in the Isle of Man—the Parys Mountain Copper Mines; Mining in Scotland—Visit to the Loch Fyne Mines—No. II.; Meteoric Stones; Australian Mines (the news by the last mail); Copper Mining in South Australia; the St. John del Rey Mine Report; accounts of the South Gornal, Great North Tolgus, and West Penrithal Mines and Mining Districts, &c.

* With last week's JOURNAL we gave a SUPPLEMENTAL SHEET, containing the International Jurors' Awards in Class VIII.; descriptions of the articles exhibited by the Stephenson Metal Tube Company and the Colebrookdale Iron Company; Cartier's Iron Minium—a substitute for red lead; Frictional Gearing; Pinel's Safety Apparatus for Steam-boilers; Allen's Improved Iron Bedsteads; Clayton's Brick-making Machinery; the Electric Experiments at the Polytechnic; Improvements in Gunpowder; Progress of Invention; Deville's Process for the Treatment of Platinum in Masses; the Report of the Manchester Steam-boiler Association; Evans's Treatment of Peat; and the Description of the Great North Tolgus Mine and District.

THE MINING JOURNAL

Railway and Commercial Gazette.

LONDON, AUGUST 23, 1862.

Among the statutes which were hurriedly passed by the Legislature during the latter days of the last session of Parliament, there is one which capitalists have been anxiously expecting for the last three or four years: we allude to the statute of 25 and 26 Vict., cap. 89.—"An Act for the Incorporation, Regulation, and Winding-up of Trading Companies and other Associations." This Act is a very long and a very important one, and largely affects the recent principle of limited liability. The main features of such principle are preserved intact, so far as the same are applicable to companies the liability in which is limited by shares, but they have been extended to embrace as well companies the liability in which is limited by guarantee, and not having a capital divided into shares, as also companies the liability in which is limited by guarantee, and having a capital divided into shares. These are novelties, the former being framed, as it appears to us, to meet the case of a company on the Cost-book Principle, the capital in which, as our readers are aware, is not usually in shares of fixed amount. From time to time it has been urged in these columns that the joint-stock principle was not suited to mining companies, for the reasons that the cost of proving a mine could scarcely if ever be foreseen, and the amount of capital and number of shares could rarely be fixed with certainty; and, therefore, that capital divided into shares of a determinate amount, without which limited liability could not be enjoyed, was inconvenient and inapplicable. This difficulty is now obviated, and all the advantages of the limited liability principle rendered applicable to mining on the Cost-book System. This is a boon, and a very great one, and will doubtless place mining companies on a safer and more satisfactory footing. We may also add that from a consideration of other points of the Act we draw the conclusion that the Legislature would gladly see the joint-stock principle largely applied to Cornish companies, for it not only confers large powers upon the Stannary Courts, but enables a Cornish company to be wound-up in London by the Vice-Warden, if he thinks that from any cause, such as where the majority of shareholders live in or near the metropolis, &c., such a course would be a saving of expense, or desirable. Thus we may before long witness the innovation of a Cornish mine being wound-up in London by the Vice-Warden administering the Stannary law in the metropolis. Whether this will work well in practice remains to be seen, but this we know that complaints have been often urged by London shareholders of the inconvenience of a winding-up at Truro, 200 miles at least from the domiciles of the majority of the shareholders, and that the above enactments have been specially designed to meet the objection.

There are other salient features of the new Act, which did space permit we would now descant upon, particularly upon the winding-up portion, which unfortunately monopolises about one-half of the 202 sections into which the statute is divided. The law as stated in this portion is not only very prolix in expression, but is so intricate and unsatisfactory that we impatiently look forward to the time when windings-up will be governed by a few concisely expressed principles, worked by a simple and inexpensive formula. Notwithstanding this blot, the Act is, taken as a whole, an amelioration of the old law, and as such we cordially welcome it, and recommend it to our readers.

We have stated that the Act is in many parts very prolix, and that in other parts the law is laid down in an intricate and confused manner; this is so true that the bare Act is unintelligible to a reader without very close study, aided by a competent knowledge of legal principles; and, therefore, in order to meet the wishes of the many, we have arranged with Mr. THOMAS TAPPING, the author of the "Cost-book Prize Essay" and other mining works, to publish a cheap, compendious, and popular exposition of the new Law of Joint-Stock Companies, designed as a practical guide to capitalists, promoters, and all others interested in the subject. As Mr. TAPPING is now engaged upon the work, and has promised to produce the MS. with all possible dispatch, we believe we shall be enabled to lay the work before our readers in the course of a few weeks, and in ample time

for the use of those persons who desire to register companies under the new Act, and avail themselves of lesser stamp duties conceded thereby.

THE FATAL BOILER EXPLOSION NEAR WIGAN.

The inquest on the bodies of Robert Hilton and Peter Chadwick, two men killed by the explosion of a boiler at the Scott-lane Colliery, Blackrod, near Wigan, worked by Messrs. Woods and Son, was resumed on Monday, before Mr. Price, deputy county coroner. The boiler was one of a series of six, placed down, according to the evidence of John Smethurst, the colliery manager, five years ago. The boilers were all new, were made by the Haigh Boiler Company, and were considered of excellent construction. The boiler, situated close to the colliery, was used for the purpose of winding on the rope of the incline, and for pumping during the night. On the evening of about 9 o'clock, Robt. Hilton (the engine-tender), Wm. Hunter (the fireman), and Peter Chadwick (a farm labourer), were seated in the fire-hole, immediately in front of the boiler, which was one of the pair in the couple near the engine, and of an egg shape, when it exploded. One of the plates near the fire-hole was forced off, and the boiler was divided into two portions, one of which was thrown into the air, and the other, about 4 tons in weight, was forced against the chimney in connection with the boiler, which was knocked down by the concussion. The boiler was scattered in all directions, doing considerable damage. The engine was killed at the spot, and Chadwick, who had visited the works for chat and pasture, was severely injured that he died on the following day. The fireman escaped with some serious bruises, from which he had so far recovered as to be able to give evidence at the inquest on the 11th inst., when he stated that on the Thursday evening he had been on duty, and was seated in the fire-hole, and found them all right, and the boiler was divided into two portions, one of which was thrown into the air, and the other, about 4 tons in weight, was forced against the chimney in connection with the boiler, which was knocked down by the concussion. The boiler was scattered in all directions, doing considerable damage. The engine was killed at the spot, and Chadwick, who had visited the works for chat and pasture, was severely injured that he died on the following day. 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THE INTERNATIONAL EXHIBITION-1862.

The display of copper ores in the South Australian court is very extensive, and may with justice be considered to constitute the most important collection of this mineral that is exhibited at South Kensington. The Australian continent is indeed a rich one in minerals, and a most valuable source of supply to the British Crown. At present, however, we intend to confine ourselves to a description of the contribution made by the southern portion of the island, from what at the present time appears to be the principal source of its wealth, also a short account of its mines. The principal mines of South Australia have obtained a world-wide celebrity, and it may not prove uninteresting to our readers to give a brief outline of their history, together with a succinct statement of the financial results of the various speculations. In subsequent numbers we propose to review the products of the other divisions of the island, and to give some account of the gold fields of Victoria and New South Wales, the almost fabulous quantities of which have altogether thrown the El Dorado of the American continent (California) into the shade. The Burra Burra Mines were the first of any consequence which were started in South Australia, and the remarkable success of the operations carried on there had a sort of magical influence on the establishment of this colony. Speculators and miners from all parts of the world flocked in thousands to share, if possible, the good fortune of those who opened the Burra Burra; and, without doubt, they would have met with disappointment had not the more dazzling promises of Victoria and New South Wales drawn away so large a proportion of that class which had contributed to so great an extent to the successful establishment of the copper mines of South Australia. We now turn to *practical miners*, and it was this very class of men who reaped the most abundant harvest at Victoria's first gold harvest. The result of such an expedition from the infant and less alluring mines of copper for a time was not prejudicial to the interests of South Australia, and as the price of silver was doubled by the scarcity of hands, capital that was originally intended for investment in copper mines was otherwise diverted, and, as a natural consequence, many speculations, which at the outset appeared extremely promising, became perfect failures. But they are not destined to remain in their present position of neglect, the steady and unflinching efforts at Burra Burra, and other mines of which we shall hereafter speak, will surely offer sufficient inducement for the renewal of work at such places, as the before-named causes were the only reason of stoppage. The Burra Burra Mines were first commenced in the year 1845, with the modest capital of 1500*l*. They are situated about 90 miles from the city of Adelaide, in a north-easterly direction, and are comprised within the northern moiety of the Burra Creek special survey of 20,000 acres, which was taken on Aug. 16, 1845, by Messrs. C. H. Bagot and G. F. Aston, themselves and others, who were afterwards incorporated as the SOUTH AUSTRALIAN MINING ASSOCIATION. The union of the parties represented by Messrs. Bagot and Aston and by Messrs. Allen and Stocks, was entered into for the purpose of obtaining the special survey that each party had previously been most earnestly, but vainly, endeavouring to secure, neither being able to lay out for that purpose the large sum of 20,000*l*., which was the price required by Government for a special survey of 20,000 acres of land. Messrs. Kingston and Jacob were appointed to survey the land, and immediately on the survey being defined a straight line was drawn transversely through the centre from east to west, and, in accordance with previous arrangements, on Sept. 20, 1845, lots were drawn for the northern moiety of the Burra Burra Mines fell to the lot of Messrs. Bagot and Aston's party, and the southern moiety became the property of Messrs. Allen and Stocks (afterwards known as the Princess Mine). An amalgamation of the proprietors represented by Messrs. Allen and Stocks with the South Australian Mining Association took place before the division of the survey. No time was lost in developing the northern portion of the survey. On Sept. 29, 1845, the first blast was made in the lode of rich copper ore which projected on the surface, and the operations (which commenced with ten miners, a smith, and a captain) have been continued almost without intermission, to the extent of yielding direct employment on the works to upwards of 1100 individuals. The works were at first carried on in a very rude manner, and the aid of machinery, or any of those useful auxiliaries which are now in the mines of Cornwall, and with but very few experienced miners. Notwithstanding these disadvantages, the produce of the mines for the first six years amounted to nearly 80,000 tons of copper ore, of a richness exceeding anything yet met with in the history of mining. And although the bulk of the ore had to be carted over 100 miles of unmade road to a point of shipment, and thence carried by ship to a market some 16,000 miles distant, a profit was obtained on the working of these mines for that period of no less a sum than 438,552*l*., and that with the small working capital of 1500*l*. Such results have no parallel in the history of copper mining in any other country, and from this we ought to be reminded of the fact that Great Britain does possess colonies, not only of British capital, and the association of Anglo-Saxon genius and enterprise with colonial interest must certainly effectually cement that bond of union between the colonies and the mother country. We here see that the Burra Burra Mines have paid for 16 years an annual interest of 50 per cent. The profits would have been still greater but for the expenses before stated, which attracted no less than 942 of the miners engaged at these works from their pursuits at Burra Burra to the gold fields of Victoria. This occurred in the year 1852, and in consequence of the operations were stopped, the water allowed to rise to its natural level, and the operations were confined to dry levels, with only 100 workmen. This state of things continued until 1854, and might have remained so, had not the Government of Sir H. Young, duly recognizing the vast importance of resuming the operations of this great mine to its utmost limits, taken prompt measures to introduce a number of Cornish miners. The greatest number of hands employed during 1859, when it amounted to 1170 individuals, and the gross value of the produce from the commencement to the end of 1861 was 836,000*l*. The specimens exhibited by these works consist of several lumps of sulphate of copper, in matrix of limestone, from a depth of 60 fms., yielding 50 per cent. of metal. Red oxide of copper, associated with siliceous matrix; green carbonate of copper, associated with siliceous matrix; blue and green carbonates of copper; malachite, in siliceous matrix; and green carbonate of copper, associated with iron, from the lowest workings, a depth of 60 fms., yielding 50 per cent. of metal; green carbonate of copper; malachite, in siliceous matrix; and green carbonate of copper, associated with iron. Such is the description of the specimens exhibited by South Australia's first great copper mine; we will now proceed to give similar descriptions of the other mines represented at the Exhibition.

THE GREAT NORTHERN COPPER MINING COMPANY exhibit a large quantity of rich red oxide, containing a high percentage of copper—say, from 40 to 50 per cent. This company commenced its operations in the year of 1860, and have since continued them with considerable success. They have, however, hitherto been working without the aid of machinery, but it is now found necessary to erect a steam-engine, and ore-crushers, which will tend not only to increase their production, but also to render the working of the mines much more profitable. This company consists altogether of an English proprietor, and it is to be hoped that English capital of sufficient amount will be attracted to the purpose of uniting this great mining district with the ship-

ping ports. The Government have acted very liberally, and in consequence of the improvement effected on the roads by them, cartage can now be obtained at 4*l*. 10*s*. per ton, at which rate there is now no difficulty in procuring sufficient for present requirements; but with the prospect of a great increase of traffic from this company's and other mines in the North, it is extremely desirable that a tramway should be constructed, and that as speedily as possible. In addition to what the Government have already done, they have promised forthwith to have a township laid out near the Great Northern Company's mine (Nuccaleena), and have also decided upon sinking wells along the line of traffic, the tenders for which they have even now invited contractors to furnish. The company have already shipped off 600 tons of ore to England, and have a considerable quantity now lying ready for shipment. There are several other mines to the North of Port Augusta of very great promise, especially the Yudanamatana.

THE KAPUNDA MINE is the next for review, and as it is one of the oldest, as well as most successful, of the South Australian copper mines, we will lay before our readers, first the description of its contribution as exhibited, and then proceed with a brief account of the operations carried on there from the time of commencement. Some very fine specimens of native, or malleable, copper are amongst the most noticeable shewn, which contain nearly 70 per cent. of pure metal. Bell-metal and peacock ores, grey and black sulphurets, blue and green carbonates, muriates, yellow ore, and almost every other variety found in the district are also exhibited by the proprietors of this mine, who, having smelting works, send some very excellent samples of fine copper in cake, and ingots made from ores of which the above are samples. These mines are situated in the county of Light, about 50 miles north-east of Adelaide. They were first discovered in 1843, by Mr. C. S. Bagot, of London. The ore was cropping out on the surface, and was discovered during a search for some straying sheep. The land being then unsurveyed, and the property of the Crown, forming part of Capt. Bagot's sheep run. The survey and purchase having been completed, the first ore was raised on Jan. 8, 1844. On Jan. 23, the first five dray loads of ore left the mine, and on March 4, 1845, the first horse-whim commenced drawing water, which kept the levels dry until 1847, when a 30-in. double cylinder engine was procured from England, together with pumps; these were got into working order on July 1, 1848, and have continued to work ever since, together with the crushing machinery. The great increase of water in 1850 rendered it necessary to obtain a 36-in. cylinder engine, and larger pumps, which were also attached to the engine first erected. Two smelting furnaces were erected in 1849, but in 1852, the gold mania being at its highest point, they were brought to a stand in consequence of the loss of workmen, and operations were not again resumed until 1855. The mines were also nearly closed, as at one time only four miners remained at work. In 1854 and 1855, however, large numbers returned, and since that period the works have been continued without material interruption, and with unvarying success. The last return shows that 302 men and 36 boys were employed at the mines and furnaces. The entire quantity of ore raised from the commencement to the end of 1861 was 35,280 tons, of 21 cwt. The quantity raised in 1861 being 3306 tons, of an average of 18*l*. 15*o* per cent. The Wallaroo Mines are of considerable importance, and bid fair to increase with their development. The mine which was originally known as Wallaroo (others in the same district being now often included under that name) was discovered by a shepherd named Boor, on Dec. 17, 1859. In the following February four Cornish miners were employed, and thenceforward operations were rapidly extended, until they reached their present position; there being now employed at the works belonging to this proprietary about 490 men. Several shafts have been sunk, engines, engine-houses, powder-magazines, and other buildings, have been erected, and 11,370 tons of ore were raised up to Jan. 31, 1861. Two steam-engines, of the united power of 180 horses are already employed here; and three more, of a united power of 195 horses, have been ordered in addition. The nature of the ores exhibited by these mines is principally green carbonate; they also exhibit some fine specimens of black ore, silver-grey ore, peacock ore, grey and red oxide, copper glance, and sub-oxide of copper. The mines are at present the property of Capt. Hughes and partners.

THE NEW CORNWALL MINERAL ASSOCIATION'S works are amongst the latest that have been opened, yet, from certain whisperings, we are almost inclined to believe it will rival in richness of produce, if not surpass, the celebrated Burra Burra Mines. The largest block of copper ore shown in the Exhibition is from these works; it is composed of rich grey oxide and gossan, and weighs upwards of 6 tons; it is a most imposing object, and occupies a prominent position in the South Australian Court, very nearly opposite to the Canadian Wood Trophy. The quality of the ore is very high in the standard of richness. At the Duryea shaft a lode was struck about 11 fms. from the surface, from 7 ft. to 8 ft. 6 in. thick, and found to contain 64 per cent. of copper by analysis. Water was here struck, which induced the directors to sink an engine-shaft to the depth of 15 fms., and erect a horizontal, high-pressure, pumping-engine. A drift was then made into the Duryea shaft, in which two winzes have been sunk, one 9 fms. and the other 4 fms. From these winzes rich black ore has been raised, yielding from 52 to 57½ per cent. of copper. This mine is nothing like so extensive as the Burra Burra, but what we have stated in connection with it will enable our readers to conclude as to their relative prospects. It must also be stated that the New Cornwall Mineral Association was only incorporated in April, 1861, and, therefore, have had but very little time to develop the resources of their mine ground, which is composed of fifteen sections, of 80 acres each, making in all 1200 acres. The proprietors say they have sufficient ore raised, and at grass (if valued at the lowest price), to cover the entire expense of opening the mines, erecting engine, and building houses, stores, &c.

The greater consideration we give to the enormous capabilities of our several colonies, the better acquainted we become with their requirements, and conviction grows stronger that it is not only the duty of English capitalists to seek investments there in preference to gambling in foreign loans, which at any time may turn out as valueless as the Mexican; or the dabbling in such stock as American railways, and have the threat of confiscation held before them on the slightest political difficulty arising between our own Government and that of the "States." We say it is not only the duty of Englishmen to confine the employment of their capital to such schemes as are within the limits of the great British empire, but that it will ultimately prove to their own advantage, for that empire certainly does possess such opportunities for profitable employment of capital as no foreign nation can ever offer; or, if offered, give that security for its safety that the British Government can give. We feel, then, that it is not possible to urge too strongly upon those of our readers who have capital to invest the great duty they owe to their country, as well as themselves, in the proper employment of that capital. Australia, India, Canada, British Columbia, British North America, British possessions in Africa, the West Indies, British possessions in Europe, and, lastly, the United Kingdom itself, are each and all forcibly demanding attention—each offering something worthy of notice, and each loudly claiming a share of the nation's capital, every farthing of which they need. Shall, then, these wants be despised and overlooked, and the thing needful be placed at the disposal of the foreigner?

Amongst the large collection of articles exhibited at South Kensington in which the mining public may not take a prominent interest, but which in reality is of immense importance to the miner for several different purposes, is gutta percha; and it is now our present intention to describe that part of the GUTTA PERCHA COMPANY'S contribution which is of use to the mining and engineering world; also to give some little information respecting the uses to which it may be applied, such as many practical and clever miners are unaware of at the present time. In the first place, it may not prove uninteresting to some of our readers to give a short account of the mode of obtaining and reducing gutta percha to the state in which it is usually brought previously to being moulded into the many forms that meet our eye, as we survey the varied and extensive stock of the company whose production are the subject of this review, and who may truly be considered as the *bona fide* introducers of gutta percha to the English public. We propose also to give a brief history of its discovery, feeling assured that many users of it, from the universality of its application, merely look upon it as being capable of every transformation to which fancy or requirement may choose to subject it, and have not taken sufficient interest beyond its suitability to their purposes to enquire how it was discovered, or who was the discoverer. Nor is it our desire simply to give information on this point, but by doing so to show that many of the most useful productions of the present day have been discovered centuries later than they might have been. It is, therefore, to stimulate the spirit of enquiry that we give a concise account of the discovery of gutta percha.

Like several other useful substances and inventions, gutta percha appears

to have had two discoverers about the same time. The one was Mr. Lobb, an agent of the well-known florists of Exeter, the Messrs. Veitch, who visited the East Indies in the year 1842; and the other was Dr. Montgomerie, assistant surgeon to the residency of Singapore, on the Malay Peninsula. He one day observed in the hand of a native woodsman a wood-chopper, the handle of which was composed of a singular looking substance, and this excited his curiosity. He questioned the workman in whose possession he saw it, and heard that the material of which it was formed could be moulded into any shape by dipping it into boiling water until heated through, when it became as plastic as clay, regaining when cold its original hardness and rigidity.

Dr. Montgomerie further ascertained that the substance, like caoutchouc, exuded from a forest tree. He then procured specimens in various stages of preparation, and transmitted them to the Society of Arts. They were then subjected to a close and testing examination, the result of which was the award of the gold medal of the Society to Dr. Montgomerie "for a very valuable discovery." Scientific men speedily perceived a few of the great capabilities of gutta percha, and a demand for it commenced, which has now created an important trade. The extent of territory occupied by the percha tree in its several varieties it is impossible even to guess, but it is known to abound not only on the Malay Peninsula, but also on the neighbouring island of Singapore, in Borneo also, and other islands of the vast Oriental Archipelago. The old Arabian explorers of the East declared, with somewhat of hyperbole, that those sunny seas contained 12,000 isles, and it is not improbable that the tree is scattered over 500,000 square miles of country. At present, however, the trade is confined principally to the island and settlement of Singapore. The tree is ranked by botanists among sapotaceous plants—i.e., those that exude a milky sap. The sap or "gutta" circulates between the bark and body of the tree; the milky fluid exudes from notches cut at intervals down the trunk, and is received in vessels, where it immediately coagulates. It was formerly the custom to fell the tree before collecting the juice, but this plan is now proved as unnecessary as it is wasteful; the notches neither injure the tree nor prevent a second accumulation of sap.

The Gutta Percha Company have wisely embarked a considerable capital in seeking to promote the tapping instead of the felling of trees. The thickened fluid, before being finally hardened, is kneaded into compact, oblong masses, generally about ½ cubic foot in size. This part of the work is performed by women, but the blocks made up for exportation are not always of one shape: the eccentricity or genius of some barbarian forester will sometimes vary them amusingly. The Gutta Percha Company exhibit two blocks, designed to represent fishes. In such instances, however, art, like virtue, must be its own reward, as the blocks, whatever their form, are sold without distinction by weight. This fact, we are sorry to say, has occasioned another sort of cunningness in the Malays, and some of the lowest tricks practised in trade have already become naturalised in savage life—a stone, for example, is frequently found embedded in the centre of the mass to add to its weight. It is, of course, quite impossible to detect the imposition, unless, indeed, the stone should be so large as to render the block unusually heavy for its size. The mischief of the matter is, not that the barbarians get a trifle more than their due, but the machinery of the Gutta Percha Company is liable to be seriously damaged; the keen blade that shears through the gutta percha is frequently notched or broken by coming into contact with the stone. This petty knavery, which we hope the Malays did not learn from Englishmen, is thus a constant source of annoyance and expense. Nor is it to stones that this kind of cheating is confined, for we have heard of such things as *cannon balls* being found, sometimes as heavy as 14 lbs., in the midst of a block. The chemical composition of pure gutta percha is—Carbon, 86.36; hydrogen, 12.15; oxygen, 1.49=100; a result almost identical with Dr. Faraday's analysis of caoutchouc:—Carbon, 87.2; hydrogen, 12.8=100. It is a question, indeed, whether the composition of the two substances is not precisely the same, the small quantity of oxygen detected in gutta percha being derived from the air during the process of purification. Exposed to a temperature of 248° it melts, and in cooling remains in a semi-fluid adhesive state, partially decomposed, in fact, and when ignited burns readily. At a temperature of 200° it becomes soft and ductile, though without stickiness, and can be moulded into any shape, which it retains on cooling. Its solid state is far more rigid than caoutchouc, being only slightly elastic; its specific gravity is .975, that of water being 1.000; its tenacity and durability are extraordinary, and, indeed, when at length it does wear out it may be renovated and re-manufactured. It is repellent of, and completely unaffected by, cold, fresh or salt water, or damp. It is a non-conductor of heat and electricity, and is alkali and acid-proof, being affected only by concentrated sulphuric acid. The most powerful acetic, hydrofluoric, and muriatic acids, and chlorine have no injurious effect upon it. Its power of resisting frost is extraordinary. Amongst the many uses to which it is applied, and which is of most valuable aid to the miner, is gearing for pit buckets; an instance of its great superiority over leather (which, until the discovery of gutta percha, was the substance employed) may be shown by the results of its trial at the Cinderford Collieries, in the Forest of Dean.

In the year 1855, in the course of sinking the pumping-shaft to the Coleford Hill delf coal, through a very hard grey sandstone rock, a great deal of water was encountered, and, in consequence of grit being sucked into the pump (which was 14 in. diameter), the leather gearing of the bucket would never last longer than 12 hours. This became so serious a loss, not only from the actual expense of renewal, but of valuable time, inasmuch as the water, as a matter of course, rose in the pit, and had to be pumped out again before the sinkers could resume their operations, the manager of the works, Mr. W. H. Jordan, determined to use gutta percha gearing, and, instead of requiring to change the bucket in 12 hours (as with leather), this very bucket lasted six weeks. The Gutta Percha Company exhibit gearing quite ready to be put upon the bucket shell, so that it is simply requisite to send the size of the shell in order to be provided with the gearing ready for use. In the case mentioned of the Cinderford Collieries a large sheet was obtained, and a strip cut off to the size required, and moulded round the shell by the engineer by means of hot water. The plan of getting the gearing complete from the works is, however, by far the best. There are also exhibited speaking tubes for mines, or rather specimens of tubes made for that purpose. It is quite needless to dilate upon the advantages which these tubes offer over the old system of signalling. Ventilating tubes are shown which, in the driving of cross roads, must, from their lightness and perfect air-tightness, be very useful. There are also specimens of alarm tubes, as well as clocks and valves. It has occurred to us that a thin coating of gutta percha over the ordinary round wire-rope, used for winding, would be of great service in frosty weather, for it is well known that wire-ropes are frequently very injuriously affected by frost, which makes them crystalline, and thus by destroying the fibre renders them liable to break. Were each strand of a rope to be coated in the manner we have now hinted, we are inclined to believe it would prevent such effects. Gutta percha is also used very extensively in mills and factories for straps and bands. Of this description several specimens are exhibited. These bands may be manufactured any length, and are very much cheaper, and more durable, than leather bands. It is for electrical purposes that gutta percha has, perhaps, proved more valuable than any other. There is a very extensive display in Class XIII. of the telegraph cables coated by the Gutta Percha Company. This consists not only of the contribution which they make themselves, but also of a large collection of cables manufactured by Glass, Elliott, and Company, as well as several other eminent firms which have been covered by this company. To return to their stall in the eastern annexe we saw insulating stools, battery cells, handles for discharging rods, electrolytic moulds, and galvanic batteries. Also, an extensive display of articles for chemical purposes, too numerous to mention. There is, as we before said, no limit to the application of gutta percha, and this is clearly demonstrated by the examples shown by this company. We must not, however, close this notice without mentioning a great curiosity that is exhibited by them in the north gallery. It consists of a large sheet of gutta percha, about 12 ft. long and 9 ft. wide, perfectly transparent, and not more than one three hundredth part of an inch in thickness.

WINDING ENGINES FOR COLLIERY PURPOSES.—Near the extreme end of the north-eastern annexe, as some of our readers may by this time have learnt, there are some stands belonging to Class VIII., the principal portion of which is in the western annexe, more than half a mile distant, and amongst these ill-placed stands is one belonging to Messrs. THORNEWELL and WARHAM, the well-known mining machinery makers of Burton-on-Trent. Their display, although by no means an extensive one, is well-deserving the attention of all connected with mining and colliery operations. It consists of a pair of model winding-engines, and a drawing showing the mode in which they substitute equilibrium valves for the ordinary slide. The International Jurors have awarded a prize medal for the excel-

Longholm—the mountain limestone had always been known, but the boundary had never been correctly shown on any map; he discovered, however, nearly all the Canobie coal seams as well as the Permian limestone, and his efforts have now been rewarded by the discovery of another coal field on the south of the River. The quality of the coal on the Netherby estate seems to be fully equal to that of the Newcastle coal, whilst the facility with which it may be worked cannot fail to enable it to maintain a position in the market. Mr. Gibson's discovery not only will the township of Solport and the Canobie district be benefited, but great advantages must accrue both to the North British Railway and to the Silloth Railway and Dock, so that it is probable that the honour that will reflect on Mr. Gibson from the fact of the coal itself will far exceed any that could have been conferred upon him by the North of England Institute of Mining Engineers, who had the value of his discoveries been discussed, instead of the question whether the Canobie coal field is a "regular" coal field, or otherwise, which anyone might at once have seen by simply looking at the plans and sections, and without reading the paper at all.

THE INTERNATIONAL EXHIBITION—1862.

The display of copper ores in the South Australian court is very extensive, and may with justice be considered to constitute the most important collection of this mineral that is exhibited at South Kensington. The Australian continent is indeed a rich one in minerals, and a most valuable appendage to the British Crown. At present, however, we intend to confine ourselves to a description of the contribution made by the southern portion of the island, from what at the present time appears to be the principal source of its wealth, also a short account of its mines. The copper mines of South Australia have obtained a world-wide celebrity, and it may not prove uninteresting to our readers to give a brief outline of their history, together with a succinct statement of the financial results of these various speculations. In subsequent numbers we propose to review the products of the other divisions of the island, and to give some account of the gold fields of Victoria and New South Wales, the almost fabulous quantities of which have altogether thrown the El Dorado of the American continent (California) into the shade. The Burra Burra Mines were the first of any consequence which were started in South Australia, and the successful success of the operations carried on there had a sort of magical influence on the establishment of this colony. Speculators and miners from all parts of the world flocked in thousands to share, if possible, the good fortune of those who opened the Burra Burra; and, without doubt, we would have met with disappointment had not the more dazzling promises of Victoria and New South Wales drawn away so large a proportion of that class which had contributed to so great an extent to the successful establishment of the copper mines of South Australia. We now turn to *practical miners*, and it was this very class of men who reaped the most advantage at Victoria's first gold harvest. The result of such an invasion from the infant and less alluring mines of copper for a time was prejudicial to the interests of South Australia, and as the price of copper was doubled by the scarcity of hands, capital that was originally intended for investment in copper mines was otherwise diverted, and, as a consequence, many speculations, which at the outset appeared promising, became perfect failures. But they are not destined to remain in their present position of neglect, the steady and unflinching perseverance of Burra Burra, and other mines of which we shall hereafter speak, will surely offer sufficient inducement for the renewal of work at such places, as the before-named causes were the only reason of stoppage. The Burra Burra Mines were first commenced in the year 1845, with the modest capital of 1500*l*. They are situated about 90 miles from the city of Adelaide, in a north-easterly direction, and are comprised within the territory moiety of the Burra Creek special survey of 20,000 acres, which was on Aug. 16, 1845, by Messrs. C. H. Bagot and G. F. Aston, themselves and others, who were afterwards incorporated as the SOUTH AUSTRALIAN MINING ASSOCIATION. The union of the parties represented by Messrs. Bagot and Aston and by Messrs. Allen and Stocks, was entered into for the purpose of obtaining the special survey that each party had respectively been most earnestly, but vainly, endeavouring to secure, neither being able to lay out for that purpose the large sum of 20,000*l*, which was the price required by Government for a special survey of 20,000 acres of land. Messrs. Kingston and Jacob were appointed to survey the land, and immediately on the survey being defined a straight line was drawn transversely through the centre from east to west, and, in accordance with previous arrangements, on Sept. 20, 1845, lots were drawn for sale. The northern moiety of the Burra Burra Mines fell to the lot of Messrs. Bagot and Aston's party (afterwards known as the Princess Mine). An amalgamation of the proprietors represented by Messrs. Allen and Stocks with the South Australian Mining Association took place before the division of the survey. No time was lost in developing the northern portion of the survey. On Sept. 29, 1845, the first blast was struck in the lode of rich copper ore which projected on the surface, and from that day the operations (which commenced with ten miners, a smith, and a captain) have been continued almost without intermission, to the present time, yielding direct employment on the works to upwards of 1100 men. The works were at first carried on in a very rude manner, without the aid of machinery, or any of those useful auxiliaries which are the mines of Cornwall, and with but very few experienced miners. Notwithstanding these disadvantages, the produce of the mines for the first six years amounted to nearly 80,000 tons of copper ore, of a richness varying anything yet met with in the history of mining. And although the bulk of the ore had to be carted over 100 miles of unmade road to a distant point, a profit was obtained on the working of these mines for that of no less a sum than 438,552*l*, and that with the small working capital, as we before stated, of 1500*l*. Such results have no parallel in the history of copper mining in any other country, and from this we ought to be struck with the fact that Great Britain does possess colonies, not only good investments for our native capitalists, but that such investments with colonial interest must certainly effectually cement that bond of union between the colonies and the mother country. We here see that the Burra Burra Mines have paid for 16 years an annual interest of 500*l* per cent. The profits would have been still greater but for the depression of these works from their pursuits at Burra Burra to the gold fields of Victoria. This occurred in the year 1852, and in consequence the operations were stopped, the water allowed to rise to its natural level, and the operations were confined to dry levels, with only 100 workmen. This state of things continued until 1854, and might have remained so, had not the Government of Sir H. Young, duly recognizing the vast importance of resuming the operations of this great mine to its utmost limits, taken prompt measures to introduce a number of Cornish miners. The greatest number of hands employed in 1859, when it amounted to 1170 individuals, and the gross amount of profit from the commencement to the end of 1861 was 836,000*l*. The specimens exhibited by these works consist of several lumps of sulphate of copper, in matrix of limestone, from a depth of 60 fms., yielding from 30 to 50 per cent. of metal. Red oxide of copper, associated with siliceous matrix; green carbonate of copper, associated with siliceous matrix; blue and green carbonates of copper; malachite, in siliceous matrix; and green carbonate of copper, associated with iron, from the lowest workings, at a depth of 60 fms., yielding 50 per cent. of metal; green carbonate of copper, malachite, in siliceous matrix; and green carbonate of copper, associated with iron, from the lowest workings, at a depth of 60 fms., yielding 50 per cent. of metal. Such is the description of the specimens exhibited by South Australia's first great copper mine; we will now proceed to give similar descriptions of the other mines represented at the Exhibition.

THE GREAT NORTHERN COPPER MINING COMPANY exhibit a large quantity of rich red oxide, containing a high percentage of copper—say, from 40 to 50 per cent. Some parts of their workings produce ores that are of a fine quality, and of a high grade. This company commenced its operations in the year 1860, and have since continued them with considerable success. They have, however, hitherto been working without the aid of machinery, but it is now found necessary to erect a steam-engine, and ore-crushers, which will tend not only to increase their output, but also to render the working of the mines much more profitable. This company consists altogether of an English proprietor, and it is to be hoped that English capital of sufficient amount will be attracted to the purpose of uniting this great mining district with the ship-

ping ports. The Government have acted very liberally, and in consequence of the improvement effected on the roads by them, cartage can now be obtained at 4*l*. 10*s*. per ton, at which rate there is now no difficulty in procuring sufficient for present requirements; but with the prospect of a great increase of traffic from this company's and other mines in the North, it is extremely desirable that a tramway should be constructed, and that as speedily as possible. In addition to what the Government have already done, they have promised forthwith to have a township laid out near the Great Northern Company's mine (Nuccaleena), and have also decided upon sinking wells along the line of traffic, the tenders for which they have even now invited contractors to furnish. The company have already shipped off 600 tons of ore to England, and have a considerable quantity now lying ready for shipment. There are several other mines to the North of Port Augusta of very great promise, especially the Yudanmutana.

THE KAPUNDA MINE is the next for review, and as it is one of the oldest, as well as most successful, of the South Australian copper mines, we will lay before our readers, first the description of its contribution as exhibited, and then proceed with a brief account of the operations carried on there from the time of commencement. Some very fine specimens of native, or malleable, copper are amongst the most noticeable shown, which contain nearly 70 per cent. of pure metal. Bell-metal and peacock ores, grey and black sulphurets, blue and green carbonates, muriates, yellow ore, and almost every other variety found in the district are also exhibited by the proprietors of this mine, who, having smelting works, send some very excellent samples of fine copper in cake, and ingots made from ores of which the above are samples. These mines are situated in the county of Light, about 50 miles north-east of Adelaide. They were first discovered in 1843, by Mr. C. S. Bagot, of London. The ore was cropping out on the surface, and was discovered during a search for some straying sheep. The land being then unsurveyed, and the property of the Crown, forming part of Capt. Bagot's sheep run. The survey and purchase having been completed, the first ore was raised on Jan. 8, 1844. On Jan. 23, the first five dray loads of ore left the mine, and on March 4, 1845, the first horse-whim commenced drawing water, which kept the levels dry until 1847, when a 30-in. double cylinder engine was procured from England, together with pumps; these were got into working order on July 1, 1848, and have continued to work ever since, together with the crushing machinery. The great increase of water in 1850 rendered it necessary to obtain a 36-in. cylinder engine, and larger pumps, which were also attached to the engine first erected. Two smelting furnaces were erected in 1849, but in 1852, the gold mania being at its highest point, they were brought to a stand in consequence of the loss of workmen, and operations were not again resumed until 1855. The mines were also nearly closed, as at one time only four miners remained at work. In 1854 and 1855, however, large numbers returned, and since that period the works have been continued without material interruption, and with unvarying success. The last return shows that 302 men and 36 boys were employed at the mines and furnaces. The entire quantity of ore raised from the commencement to the end of 1861 was 35,280 tons, of 21 cwt. The quantity raised in 1861 being 3306 tons, of an average of 18-150 per cent. The Wallaroo Mines are of considerable importance, and bid fair to increase with their development. The mine which was originally known as Wallaroo (others in the same district being now often included under that name) was discovered by a shepherd named Boor, on Dec. 17, 1859. In the following February four Cornish miners were employed, and thenceforward operations were rapidly extended, until they reached their present position; there being now employed at the works belonging to this proprietary about 490 men. Several shafts have been sunk, engines, engine-houses, powder-magazines, and other buildings, have been erected, and 11,370 tons of ore were raised up to Jan. 31, 1861. Two steam-engines, of the united power of 180 horses are already employed here; and three more, of a united power of 195 horses, have been ordered in addition. The nature of the ores exhibited by these mines is principally green carbonate; they also exhibit some fine specimens of black ore, silver-grey ore, peacock ore, grey and red oxide, copper glance, and sub-oxide of copper. The mines are at present the property of Capt. Hughes and partners.

THE NEW CORNWALL MINERAL ASSOCIATION'S works are amongst the latest that have been opened, yet, from certain whisperings, we are almost inclined to believe it will rival in richness of produce, if not surpass, the celebrated Burra Burra Mines. The largest block of copper ore shown in the Exhibition is from these works; it is composed of rich grey oxide and gossan, and weighs upwards of 6 tons; it is a most imposing object, and occupies a prominent position in the South Australian Court, very nearly opposite to the Canadian Wood Trophy. The quality of the ore is very high in the standard of richness. At the Duryea shaft a lode was struck about 11 fms. from the surface, from 7 ft. to 8 ft. 6 in. thick, and found to contain 64 per cent. of copper by analysis. Water was here struck, which induced the directors to sink an engine-shaft to the depth of 15 fms., and erect a horizontal, high-pressure, pumping-engine. A drift was then made into the Duryea shaft, in which two winzes have been sunk, one 9 fms. and the other 4 fms. From these winzes rich black ore has been raised, yielding from 52 to 57 per cent. of copper. This mine is nothing like so extensive as the Burra Burra, but what we have stated in connection with it will enable our readers to conclude as to their relative prospects. It must also be stated that the New Cornwall Mineral Association was only incorporated in April, 1861, and, therefore, have had but very little time to develop the resources of their mine ground, which is composed of fifteen sections, of 80 acres each, making in all 1200 acres. The proprietors say they have sufficient ore raised, and at grass (if valued at the lowest price), to cover the entire expense of opening the mines, erecting engine, and building houses, stores, &c.

The greater consideration we give to the enormous capabilities of our several colonies, the better acquainted we become with their requirements, and conviction grows stronger that it is not only the duty of English capitalists to seek investments there in preference to gambling in foreign loans, which at any time may turn out as valueless as the Mexican; or the dabbling in such stock as American railways, and have the threat of confiscation held before them on the slightest political difficulty arising between our own Government and that of the "States." We say it is not only the duty of Englishmen to confine the employment of their capital to such schemes as are within the limits of the great British empire, but that it will ultimately prove to their own advantage, for that empire certainly does possess such opportunities for profitable employment of capital as no foreign nation can ever offer; or, if offered, give that security for its safety that the British Government can give. We feel, then, that it is not possible to urge too strongly upon those of our readers who have capital to invest the great duty they owe to their country, as well as themselves, in the proper employment of that capital. Australia, India, Canada, British Columbia, British North America, British possessions in Africa, the West Indies, British possessions in Europe, and, lastly, the United Kingdom itself, are each and all forcibly demanding attention—each offering something worthy of notice, and each loudly claiming a share of the nation's capital, every farthing of which they need. Shall, then, these wants be despised and overlooked, and the thing needful be placed at the disposal of the foreigner?

Amongst the large collection of articles exhibited at South Kensington in which the mining public may not take a prominent interest, but which in reality is of immense importance to the miner for several different purposes, is gutta percha; and it is now our present intention to describe that part of the GUTTA PERCHA COMPANY'S contribution which is of use to the mining and engineering world; also to give some little information respecting the uses to which it may be applied, such as many practical and clever miners are unaware of at the present time. In the first place, it may not prove uninteresting to some of our readers to give a short account of the mode of obtaining and reducing gutta percha to the state in which it is usually brought previously to being moulded into the many forms that meet our eye, as we survey the varied and extensive stock of the company whose production are the subject of this review, and who may truly be considered as the *bona fide* introducers of gutta percha to the English public. We propose also to give a brief history of its discovery, feeling assured that many users of it, from the universality of its application, merely look upon it as being capable of every transformation to which fancy or requirement may choose to subject it, and have not taken sufficient interest beyond its suitability to their purposes to enquire how it was discovered, or who was the discoverer. Nor is it our desire simply to give information on this point, but by doing so to show that many of the most useful productions of the present day have been discovered centuries later than they might have been. It is, therefore, to stimulate the spirit of enquiry that we give a concise account of the discovery of gutta percha.

Like several other useful substances and inventions, gutta percha appears

to have had two discoverers about the same time. The one was Mr. Lobb, an agent of the well-known florists of Exeter, the Messrs. Veitch, who visited the East Indies in the year 1842; and the other was Dr. Montgomerie, assistant surgeon to the residency of Singapore, on the Malay Peninsula. He one day observed in the hand of a native woodman a wood-chopper, the handle of which was composed of a singular looking substance, and this excited his curiosity. He questioned the workman in whose possession he saw it, and heard that the material of which it was formed could be moulded into any shape by dipping it into boiling water until heated through, when it became as plastic as clay, regaining when cold its original hardness and rigidity.

Dr. Montgomerie further ascertained that the substance, like caoutchouc, exuded from a forest tree. He then procured specimens in various stages of preparation, and transmitted them to the Society of Arts. They were then subjected to a close and testing examination, the result of which was the award of the gold medal of the Society to Dr. Montgomerie "for a very valuable discovery." Scientific men speedily perceived a few of the great capabilities of gutta percha, and a demand for it commenced, which has now created an important trade. The extent of territory occupied by the percha tree in its several varieties it is impossible even to guess, but it is known to abound not only on the Malay Peninsula, but also on the neighbouring island of Singapore, in Borneo also, and other islands of the vast Oriental Archipelago. The old Arabian explorers of the East declared, with somewhat of hyperbole, that those sunny seas contained 12,000 miles of country. At present, however, the trade is confined principally to the island and settlement of Singapore. The tree is ranked by botanists among sapotaceous plants—i.e., those that exude a milky sap. The sap or "gutta" circulates between the bark and body of the tree; the milky fluid exudes from notches cut at intervals down the trunk, and is received in vessels, where it immediately coagulates. It was formerly the custom to fell the tree before collecting the juice, but this plan is now proved as unnecessary as it is wasteful; the notches neither injure the tree nor prevent a second accumulation of sap.

The Gutta Percha Company have wisely embarked a considerable capital in seeking to promote the tapping instead of the felling of trees. The thickened fluid, before being finally hardened, is kneaded into compact, oblong masses, generally about $\frac{1}{4}$ cubic foot in size. This part of the work is performed by women, but the blocks made up for exportation are not always of one shape; the eccentricity or genius of some barbarian forester will sometimes vary them amusingly. The Gutta Percha Company exhibit two blocks, designed to represent fishes. In such instances, however, art, like virtue, must be its own reward, as the blocks, whatever their form, are sold without distinction by weight. This fact, we are sorry to say, has occasioned another sort of cunningness in the Malays, and some of the lowest tricks practised in trade have already become naturalised in savage life—a stone, for example, is frequently found embedded in the centre of the mass to add to its weight. It is, of course, quite impossible to detect the imposition, unless, indeed, the stone should be so large as to render the block unusually heavy for its size. The mischief of the matter is, not that the barbarians get a trifle more than their due, but the machinery of the Gutta Percha Company is liable to be seriously damaged; the keen blade that shears through the gutta percha is frequently notched or broken by coming into contact with the stone. This petty knavery, which we hope the Malays did not learn from Englishmen, is thus a constant source of annoyance and expense. Nor is it to stones that this kind of cheating is confined, for we have heard of such things as *cannon balls* being found, sometimes as heavy as 14 lbs., in the midst of a block. The chemical composition of pure gutta percha is—Carbon, 86.36; hydrogen, 12.15; oxygen, 1.49=100; a result almost identical with Dr. Faraday's analysis of caoutchouc:—Carbon, 87.2; hydrogen, 12.8=100. It is a question, indeed, whether the composition of the two substances is not precisely the same, the small quantity of oxygen detected in gutta percha being derived from the air during the process of purification. Exposed to a temperature of 248° it melts, and in cooling remains in a semi-fluid adhesive state, partially decomposed, in fact, and when ignited burns readily. At a temperature of 200° it becomes soft and ductile, though without stickiness, and can be moulded into any shape, which it retains on cooling. Its solid state is far more rigid than caoutchouc, being only slightly elastic; its specific gravity is .975, that of water being 1.000; its tenacity and durability are extraordinary, and, indeed, when at length it does wear out it may be renovated and re-manufactured. It is repellent of, and completely unaffected by, cold, fresh or salt water, or damp. It is a non-conductor of heat and electricity, and is alkali and acid-proof, being affected only by concentrated sulphuric acid. The most powerful acetic, hydrofluoric, and muriatic acids, and chlorine have no injurious effect upon it. Its power of resisting frost is extraordinary. Amongst the many uses to which it is applied, and which is of most valuable aid to the miner, is gearing for pit buckets; an instance of its great superiority over leather (which, until the discovery of gutta percha, was the substance employed) may be shown by the results of its trial at the Cinderford Collieries, in the Forest of Dean. In the year 1855, in the course of sinking the pumping-shaft to the Colliery Hill delf coal, through a very hard grey sandstone rock, a great deal of water was encountered, and, in consequence of grit being sucked into the pump (which was 14 in. diameter), the leather gearing of the bucket would never last longer than 12 hours. This became so serious a loss, not only from the actual expense of renewal, but of valuable time, inasmuch as the water, as a matter of course, rose in the pit, and had to be pumped out again before the sinkers could resume their operations, the manager of the works, Mr. W. H. Jordan, determined to use gutta percha gearing, and instead of requiring to change the bucket in 12 hours (as with leather), this very bucket lasted six weeks. The Gutta Percha Company exhibit gearing quite ready to be put upon the bucket shell, so that it is simply requisite to send the size of the shell in order to be provided with the gearing ready for use. In the case mentioned of the Cinderford Collieries a large sheet was obtained, and a strip cut off to the size required, and moulded round the shell by the engineer by means of hot water. The plan of getting the gearing complete from the works is, however, by far the best. There are also exhibited speaking tubes for mines, or rather specimens of tubes made for that purpose. It is quite needless to dilate upon the advantages which these tubes offer over the old system of signalling. Ventilating tubes are shown which, in the driving of cross roads, must, from their lightness and perfect air-tightness, be very useful. There are also specimens of alarm tubes, as well as clacks and valves. It has occurred to us that a thin coating of gutta percha over the ordinary round wire-rope, used for winding, would be of great service in frosty weather, for it is well known that wire-ropes are frequently very injuriously affected by frost, which makes them crystalline, and thus by destroying the fibre renders them liable to break. Were each strand of a rope to be coated in the manner we have now hinted, we are inclined to believe it would prevent such effects. Gutta percha is also used very extensively in mills and factories for straps and bands. Of this description several specimens are exhibited. These bands may be manufactured any length, and are very much cheaper, and more durable, than leather bands. It is for electrical purposes that gutta percha has, perhaps, proved more valuable than any other. There is a very extensive display in Class XIII. of the telegraph cables coated by the Gutta Percha Company. This consists not only of the contribution which they make themselves, but also of a large collection of cables manufactured by Glass, Elliott, and Company, as well as several other eminent firms which have been covered by this company. To return to their stall in the eastern annexe we saw insulating stools, battery cells, handles for discharging rods, electrolytic moulds, and galvanic batteries. Also, an extensive display of articles for chemical purposes, too numerous to mention. There is, as we before said, no limit to the application of gutta percha, and this is clearly demonstrated by the examples shown by this company. We must not, however, close this notice without mentioning a great curiosity that is exhibited by them in the north gallery. It consists of a large sheet of gutta percha, about 12 ft. long and 9 ft. wide, perfectly transparent, and not more than one three hundredth part of an inch in thickness.

WINDING ENGINES FOR COLLIERIES PURPOSES.—Near the extreme end of the north-eastern annexe, as some of our readers may by this time have learnt, there are some stands belonging to Class VIII., the principal portion of which is in the western annexe, more than half a mile distant, and amongst these ill-placed stands is one belonging to Messrs. THORNHILL and WARHAM, the well-known mining machinery makers of Burton-on-Trent. Their display, although by no means an extensive one, is well-deserving the attention of all connected with mining and colliery operations. It consists of a pair of model winding-engines, and a drawing showing the mode in which they substitute equilibrium valves for the ordinary slide. The International Jurors have awarded a prize medal for the excel-

[illegible]

that it would be preposterous to doubt the issue of a full...
The Earl of Dudley is the proprietor of the colliery.

IMPROVED STEAM GENERATOR.—An improved steam generator, on the principle of injecting a small quantity of water on a...
The first thing to be accomplished

...the water injected at every stroke...
The downward current of steam prevents the deposit of any...
The water when injected is divided into minute particles, each one of which...
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Bank of England Notes.

BANK OF ENGLAND NOTES.—£1500 REWARD.—Whereas, the Directors of the BANK OF ENGLAND have recently...
Notice is hereby given, that a REWARD of £500 will be PAID to any one who shall...
Information to be given to Mr. Superintendent Hodgson, Police Office, Old Jewry, London; or to Messrs. FRISWILL and NEWMAN, 5, Bank-buildings, London.

Bank of England Notes.

CAUTION—BANK OF ENGLAND NOTES.—The Directors of the Bank of England hereby give notice, that it has recently come to their knowledge that some of the paper manufactured for their notes has been feloniously taken from the mills; and they desire to CAUTION all BANKERS, MONEY CHANGERS, and OTHER PERSONS, in taking payment by Bank of England notes, NOT TO DEPEND UPON THE APPARENT GENUINENESS OF THE PAPER ALONE, but to EXAMINE with INCREASED CARE the PRINTING also; and in all cases, for their own protection, to obtain and preserve the names of the persons from whom the notes are received.

India Office.

BY ORDER OF THE SECRETARY OF STATE FOR INDIA IN COUNCIL, notice is hereby given that the DIRECTOR-GENERAL OF STORES FOR INDIA will be READY, on or before MONDAY, the 25th inst., to RECEIVE PROPOSALS in writing, sealed up, from such persons as may be willing to SUPPLY the conditions of the said contract may be had on application at the India Office, Cannon-row, Westminster, where the proposals are to be left any time before 2 o'clock P.M. of the said 25th day of August, 1862, after which hour no tender will be received.

In Chancery.

WEST RIDING OF YORKSHIRE. VALUABLE FREEHOLD ESTATES AND COLLIERIES, NEAR LEEDS.

TO BE SOLD, pursuant to a Decree of the High Court of Chancery made in certain causes, entitled respectively *Brindley v. Plummer*, *Brindley v. Plummer*, and *Brindley v. Plummer*, made in the High Court of Chancery, the Judge to whose Court the said Causes are attached, by Mr. CHARLES BROUGHTON, who has been appointed for that purpose, at the Scarborough Hotel, at Leeds, in the county of York, on Tuesday, the 7th day of October, 1862, IN NINETEEN LOTS, VALUABLE FREEHOLD ESTATES, consisting of the MANOR OF MIDDLETON, the DWELLING HOUSES and the GARDENS and PLEASURE GROUNDS attached, known as MIDDLETON LODGE, MIDDLETON HALL, and MIDDLETON GRANGE, together with various ENCLOSURES of LAND, WOODLANDS, and PLANTATIONS occupied therewith; 94 Cottages, a house garden, MALT KILN, and COTTAGE, let to Mr. James Dobson. A house garden, several closes of land, smiths' shop, and mill, in the occupation of Mr. George Bennett, and the several closes of land, known as the MIDDLETON FARM, known by the names of the MANOR FARM, LOCKWOOD FARM, the SPRUIT FARM, MIDDLETON COLLIERY FARM, WEST FARM, COLEY FARM, WINDY HILL FARM, WINDMILL FARM, GRANGE FARM, and EAST GRANGE FARM, and also various CLOSES OF ARABLE, MEADOW, AND GRASS LAND in the township of Middleton, in the occupation of highly respectable tenants; and also SEVERAL ENCLOSURES OF ARABLE AND GRASS LAND, COTTAGES, and gardens in the adjoining township of Hunslet, and several plots of ground in Hunslet adapted and arranged for building sites, the whole containing upwards of 1200 acres of land; and also the GREAT TITHES OF OTHER LAND in the TOWNSHIP OF MIDDLETON, which have been commuted to rent charges of £75 5s. 6d. per acre, and also the TITHES of the said lands, and the WELL KNOWN COLLIERIES called MIDDLETON COLLIERIES, situated within three miles of the town of Leeds, and near the Leeds and Bradford Railway, with the valuable and efficient working stock and machinery thereto belonging.

Also the ADVOWSON DONATION, or right of presentation of and to the VICARAGE and PARISH CHURCH OF ROTHWELL, near Leeds, the tithes of which are commuted at upwards of £900 per annum.

Also SEVEN EIGHTH UNDIVIDED SHARES OF THE MANOR OF HUNSLLET, with all the rights and privileges thereto belonging.

The estates may be viewed on application to the said tenants, and printed particulars and conditions of sale, with plans annexed, may be had (gratis) in London of Messrs. CLAYTON, COOKSON, and WAINWRIGHT, solicitors, 4, New-square, Lincoln's Inn; Messrs. SHUM and CROSSMAN, solicitors, 3, King's-road, Bedford-row; Messrs. BLAKE, TYLER, and TYLER, solicitors, 14, Essex-street, Strand; Messrs. TATHAM and PROCTOR, solicitors, No. 36, Lincoln's Inn-fields; and in Newcastle-upon-Tyne, of Mr. WILLIAM DUNN, solicitor; Messrs. J. and M. CLAYTON, solicitors; Messrs. R. P. and H. PHILLIPS, solicitors; of Mr. TANNER, solicitor, Bristol; of Messrs. NEWSON and SON, land surveyors, Leeds; of Mr. CHARLES BROUGHTON, auctioneer, Newcastle-upon-Tyne; at the place of sale; and at the Sun Inn, Bradford; the White Hart, in Huddersfield; the Stafford Arms Inn, Wakefield; the Station Hotel, York; the Station Hotel, Hull; the Queen's Hotel, Manchester; the Adelphi Hotel, Liverpool; and the principal Inns in the West Riding of York.

Dated this 25th day of July, 1862.

TO CONTRACTORS, MINERS, AND OTHERS.—The PARK LEAD MINING COMPANY (LIMITED) are OPEN TO RECEIVE TENDERS for CLEARING AND REPAIRING a certain DAY LEVEL, or TUNNEL, at MINERA, and for EXTENDING the SAME to the PARK VEIN; the entire work comprises three-quarters of a mile, or thereabouts.

Plans and specifications may be seen on application to the secretary, Mr. EDWARD WILLIAMS, at the office of the company, 4, King-street, Wrexham.

Sealed tenders to be addressed to the secretary as above, and sent on or before Thursday, the 4th of September next.—August 18, 1862.

WANTED, A PARTNER who can command £1500 to £2000, to EFFICIENTLY WORK A VEIN OF THE BEST HARD FOREST OF DEAN COAL, by a level now being driven into the coal, and situated about three miles from the port of Lydney, with which it has direct connection by railroad. The party, if preferred, may have it for a term of years at a royalty tonnage. In either case the rails, level carts, tools, &c., are to be taken at a valuation.—For further particulars, apply to DAVID DAVIES, Lydney, Gloucestershire.

WANTED, FOR THE NORTH OF SPAIN, A PERSON well ACQUAINTED WITH COPPER MINING, TIMBER WORK, and FITWORK. He must also possess steady habits, and be able to keep the rough accounts of a mine, under the supervision of a manager residing in the province.—Applications, accompanied with testimonials, and stating salary, to be addressed to Capt. JOHN BARRETT, care of Mr. W. H. Gray, engineer, St. Austell, Cornwall.

SLATE QUARRYING PROPERTY, CARNARVONSHIRE.—THE LEASE of a highly VALUABLE and proved SLATE QUARRY TO BE VISITED, in the neighbourhood of LLANLLENNI. The land may be leased live, if required, and trespasses thereby avoided.—Principals only, or their agents, may receive further particulars from Mr. W. R. WILLIAMS, mining engineer, land and mineral surveyor, Dolgelly, North Wales.

THE DEVON NEW COPPER MINING COMPANY (LIMITED). DISTRICT OF ASHBURTON, DEVONSHIRE. Incorporated, with limited liability, under the Joint-Stock Companies Act, 1856-57. Capital, £40,000, in 20,000 shares, of £2 each. Of which 12,600 have been allotted, and the full amount paid up on them.

Issue of 7500 preference shares, fully paid up, at £1 5s. each, the holders of which will be entitled to a preferential dividend of 10 per cent. out of the net profits. Deposit, 5s. per share on application, and 5s. upon allotment. No call to exceed 5s. per share.

CHARLES OTTER, Esq., Chairman, Parosloe, Barking, Essex. JOHN AMOR, Esq., 135, New Bond-street. JOHN D. BARRY, Esq., 45, Thistle-square, Brompton. J. A. BURKINWOLD, Esq. (Director of the Calcutta and South-Eastern Railway Company), Warwick-gardens, Kensington. DUGALD LATTEY, Esq., Oldfield Lodge, Maidenhead. Capt. W. MOORSOM, C.E., Great George-street, Westminster. W. R. PARKER, Esq., Manor House, Bexley, Kent. Major F. S. PARRY (Chairman of the Namur and Liege Railway Company), Onslow-square, Brompton.

BANKERS—London and Westminster Bank (Temple Bar Branch). MANAGER AT THE MINE—Capt. Philip Hawke. SOLICITOR—W. A. GREATER, Esq., 59, Chancery-lane. BROKERS—Messrs. Webb and Geach, 8, Finch-lane. SECRETARY—Mr. George Page. REGISTERED OFFICES—16, BARGE YARD CHAMBERS, BUCKLESBURY.

This company was formed for opening and working a mine of copper ore in an extensive and richly mineralized district of Ashburton, county of Devon. Upwards of £25,000 has already been expended on the mine, which has resulted in the discovery of two large mineral-bearing lodes, running east and west, and containing ore of a high percentage. A junction of these lodes will, there can now be no reasonable doubt, take place at a short depth below the present workings. When this fact has been ascertained, the mine will attain a value equal to that of any of the most successful mines in Devonshire.

It is now proposed to raise additional capital for the purpose of continuing the workings to the junction point of the lodes, and improving the existing plant, by the issue of 7500 shares at £1 5s. each (to be considered as fully paid up), the holders of which will be entitled to a preferential dividend of 10 per cent. out of the net profits until they amount to or exceed 10 per cent. upon the entire paid-up capital, when the preferential dividend will cease.

THE DON PEDRO NORTH DEL REY GOLD MINING COMPANY (LIMITED). The liability of the shareholders is limited to the amount of their shares, the company being registered under the Joint-Stock Companies Act, with limited liability. Capital, £100,000, in 100,000 shares of £1 each. Deposit, 10s. per share on application.

CHAIRMAN, HENRY HAYMEN, Esq., 12, Clarendon-road, Kensington. (Jamaica.) JOHN WORMALD, Esq. (late of the firm of Messrs. Naylor Brothers and Co., Rio de Janeiro.) W. F. DROUGHT STEPHENS, Esq., Cleveland-gardens, Hyde Park. ROBERT HESKETH, Esq. (late Her Britannic Majesty's Consul at Rio Janeiro.) EDMUND EDWARDS, Esq., C.E., 1, York-buildings, Adelphi. J. W. CUSACK, Esq., Lancaster-gate, Hyde-park.

AGENTS IN BRAZIL. Messrs. John Moore and Co., Rio Janeiro (Messrs. J. Bramley-Moore & Co., Liverpool). MANAGING AGENT AND CHIEF MINING ENGINEER. Capt. Thomas Treloar, upwards of 16 years chief mining engineer to the St. John del Rey Gold Mining Company.

AUDITORS—Official—G. H. Jay, Esq. (Messrs. Quilter, Bail, Jay, and Co.) BANKERS. Messrs. Masterman, Peters, Mildred, Masterman, and Co., 35, Nicholas-lane. BROKER—John Power, Esq., 1, Royal Exchange-buildings. SOLICITORS—Messrs. Kimberley and Pope, 26, Old Broad-street. SECRETARY—John E. Dawson, Esq.

OFFICES—9, LIVERPOOL STREET, NEW BROAD STREET. Detailed prospectuses can be obtained at the office of the company, containing a report on the mine, by Capt. THOMAS TRELOAR, upwards of 16 years chief mining engineer to the St. John del Rey Gold Mining Company.

SILVER MOUNTAIN UNITED MINES COMPANY (LIMITED).—CARDIGANSHIRE. Capital, £25,000, in 12,500 shares of £2 each. £1 per share on application, and £1 on allotment, leaving no further liability.

DIRECTORS. R. CECIL AUSTIN, Esq., Fairmile, Cobham. E. EDWARDS, Esq., C.E. (Director of Pachuca Silver Mining Company), York-buildings, Adelphi. DEANE J. HOARE, Esq. (Director of Montes Auros Gold Mining Company), 141, New Bond-street.

Major-General R. SHORTEDE, Brighton. Lieut.-Colonel F. WEMYSS, Addington-road North, Kensington. BANKERS—Metropolitan and Provincial Bank, 75, Cornhill. SECRETARY—Mr. Holland Bell. OFFICES (TEMPORARY)—16, NEW BROAD STREET.

PROSPECTUS. As the annexed extraordinary favourable and positive reports appear to make the speedy success of this undertaking a matter of certainty, the shares are issued fully paid up, and without liability.

The objects of the company are the purchase and working of very valuable and extensive silver-lead mines, called Pant-y-mawr and Cwch-y-arian (meaning mountain of silver), situated in the parish of Llanbadarnfawr, and in the heart of the richest silver-lead mining district in Cardiganshire, being surrounded by Ffrongoch, Goginan, Llogylas, Cernystwith, Grogwinlon, Cwmydol, Blaen-geunant, Cwmerin, Glogfach, and many other rich mines, paying each from £5,000 to £20,000 per annum in dividends.

The sett (which is held under lease at an average of one-sixteenth royalty) contains six masterly lodes, three passing through each mine. In the north mine, little has been done further than opening on the backs of the lodes, where, in every trial, ore has been discovered in considerable quantities, with positive indications of good courses of ore being found in depth; this ground can be speedily developed by adit levels, without incurring the heavy expense of machinery, the mountain being steep, and the outcrop of the lodes near the summit—a very favourable feature in this undertaking.

The south mine appears to have been worked superficially from a very ancient period, by open cuttings, &c., from which evidently a large amount of ore has been raised and sold. A deep adit level is now driven here about 150 fms., and has intersected Foxes lode 30 fms. under the bottom of the old workings. In driving this level east, on Foxes lode, a very rich course of ore was discovered, and partly worked away above; but it is still entire under the level, and worth about 25 cwts. per fathom. In extending this level west, on the same lode, another rich course of ore has recently been intersected, the end now driving being worth 1 ton of good ore per fathom. From most careful surveys of the surface and shallow workings, it is estimated this second course of ore is from 80 to 100 fms. long, and contains at least £30,000 worth of ore above the adit level; the amount being incalculable.

The following extracts from the reports of some of the most experienced and successful mining engineers of the day, who have carefully inspected the mines, will give a very clear idea of their position and prospect.

Captain M. Francis states:—"These mines were first discovered and worked by the Romans; after remaining, however, for centuries undeveloped, the late owner, Mr. E. Daniels (whose widow is the grantor), noticing the unexampled success attending the development of Cardiganshire mines, drove, unaided, a long adit level, which intersected Fox's lode 30 fms. under the surface workings, and struck into such masses of ore that he began to sell considerable quantities at £15 per ton, which cost him only £8 to £9, raised and dressed ready for market. This statement is vouched for and corroborated by a miner who worked in the mines. He states, 'We never had more than £5 to £6 per ton for raising ore at Blue shaft, and dressing it ready for market, and at that price we made great wages; the shaft was from 6 to 7 fms. under the adit.' Since his death, however, and in consequence of it, the rich ore ground discovered by Mr. Daniels has scarcely been touched. Goginan, or Pant-y-arian (meaning the brook of silver), the next mine to the north of Silver Mountain, was developed by me for £500; it yielded in a few years £60,000, and is now a good mine. Your property is situated in the heart of the richest silver-lead district in the county, and I believe that in depth the Silver Mountain veins will be most amply stored with metal, and afford the richest, as well as the most lasting, of the great Cardiganshire mines."

Capt. Trengwin, manager of the Grogwinlon Mines, writes—"I see in this valuable sett that the deep adit level is driven some distance west of the cross-cut in a most splendid lode, with solid branches of ore to be seen in it. No man can value such ground opened by a level; but I have no doubt by opening the sides of the level, and exposing the full width of the lode by stopping the ore, great profits will be realised. To the east of the cross-cut, on the south part of the lode, most of the ore was taken away above the adit by Mr. Daniels, at low tribute; in a stop on the north part there is a splendid course of ore laid open, worth quite £12 or £13 per fathom; I could not see the length of this ore ground, as the bargain is full of stuff. When I went to the Grogwinlon Mine, which I am now managing, there was nothing near so much ore to be seen as there is at your mine, but by going into the old workings, opening the side, and driving the levels after the old Romans, great discoveries were made, and large profits returned; and the probability of a like success with your property is corroborated by the stops opened on the north part of the lode in the eastern level. I think, by a little outlay and good management, great profits may be made in the Silver Mountain Mines. I may ask, where is there in Cardiganshire such a great chance of making profits; or where is there in this county such a long distance driven in a deep adit, on such a splendid lode?"

Capt. Painter also says—"I find the greater portion of the lode is now standing for 62 fathoms in length, on the north wall; no openings having been made either in the back or bottom of the level westward. In the present and the lode is very wet and has been for the last 6 feet driving, and produces a good quantity of solid lead ore. I obtained reliable information from miners in the neighbourhood that there is a splendid branch of silver lead ore in the bottom of a shaft 15 fathoms in advance of this end. East of the cross-cut the level has been driven 30 fathoms, and by all appearances this part of the mine must have proved very productive; in fact, ore has been taken away for the whole length of ground spent, and worked away to surface. I am also informed that the bottom of the level, under this ground, will produce at present about 25 cwts. of lead ore per fathom; should this prove correct, and I believe it is, there is not such another fine prospect to be found within a very considerable distance."

And finally, Capt. Charles Raw, of the Cwmydol Mines, under date August 9th, 1862, states—"I have carefully inspected the Silver Mountain Mine, and beg to hand you my report. I need hardly say that these grounds are situated between the Lisburne Mines, Goginan, and the Daren's—the former the best lead, and the latter the best silver-lead mine in Cardiganshire. The Lisburne Mines are making fully 200 per cent. profit upon the outlay; and the silver-lead mines make 100 per cent. on the capital invested. The extent of your grant is fully one mile on the bearings of the lodes in the north mines, and about one-quarter of a mile on the south grant—while the length of the lodes of lead and silver-lead in this county from which the great profits are made average about 120 yards, or only a small portion of the length of these sets. On going over the surface of the north mines I found several rich mines abutting on your property, amongst which I will mention Aberffrawyd and the mines on Colonel Powell's ground, to the east of your property. Your ground rises about 1000 feet above the level of the river Rhedol, affording great advantages for adits. I am persuaded that if you drive in an adit (say 60 fathoms deep) in your ground, and in the Aberffrawyd lode, where it is intersected by the Grogfach lode, you will lay open a very extensive formation of lead ore. The distance to drive will be 150 fathoms, the cost about £1000 to £1500. Goginan, immediately north of you, from such a trial divided annually a profit of from £3000 to £5000, the outlay being less than yours. On examining your south mines, I find that the ground has been extensively opened on the surface, and worked away for lead ore as deep as it could be by hand labour."

The principal workings are on the Foxes Path Lode; the lead raised from which has made great profits, but the excavation on the lode are much longer on the surface than underground. The modern workings on this lode have been made by means of an adit driven into the mountain for 100 fathoms in length, so as to intersect the lode at 30 fathoms in depth. In driving this adit a very fine lode has been discovered, but not worked upon; I am of opinion that when this vein is opened it will yield a good supply of ore, but for the present it runs through the whole mountain, and is as yet untouched, except where it is cross-cut by the adit. The 2d lode in the adit, the Foxes Path Lode, has been worked upon to the east and west of the adit; to the east it has yielded sufficient ore to pay the miners for working, on their being paid £5 10s. per ton for the clean ore, now worth £12 per ton or upwards. It is obvious that this course of ore will leave very great profits when it is properly worked by means of efficient machinery. In the western part of this mine a course of ore has been found in the adit, under the old Roman excavations on the top; these continued 80 fathoms further west than the end; and I calculate that the ore ground above the adit will yield between 2000 and 3000 tons of lead ore, and leave large profits to the proprietors of the mine. I think that this western ground and eastern ground will establish a very valuable and extensive mine below the adit, that will leave large profits, at any rate for the length of your lease. There are also some very fine lodes to the south of your adit that will in all probability turn out very great quantities of ore when your adit is driven into them.

The whole of this valuable property, including the plant, ore discovered and raised, machinery on the ground, and all the important and necessary work already completed, has been transferred for eight thousand pounds, one-half of which is taken in shares of the Company.

Applications for shares, accompanied with deposit, which will be returned in full if no allotment be made to the applicant, may be made to the Bankers, or to the Secretary, at the Office of the Company, where specimens of the ore, further reports, plans, sections, &c., may be seen.

APPLICATION FOR SHARES. To the Directors of the Silver Mountain United Mines Company. GENTLEMEN,—Having paid £ to your Bankers, I request you will allot to me shares in the Silver Mountain United Mines Company (Limited), or any less number, which I hereby accept, subject to the regulations of the company, contained in a Memorandum and Articles of Association, bearing date the 20th day of August, 1862, and duly registered.

Name in full..... Profession or description..... Residence in full..... Date..... Signature.....

THE PARKGWYN TIN MINING COMPANY (LIMITED).

Established for working the Parkgwyn Tin Mine, which is held under lease at a royalty of 1-18th on the ore sold.
Capital, £25,000, in 10,000 shares, of £2 10s. each.
Six per cent. guaranteed for the first year.
5s. per share to be paid on application, and £1 on allotment.
No future call will exceed 5s. per share at intervals of less than three months; but the directors do not anticipate any call beyond the application and allotment, as sales of tin ore will be made immediately after the erection of the machinery.
Should no allotment be made, the deposits will be returned without either deduction or delay.
Registered under the Joint-Stock Companies Acts of 1856 and 1857, with limited liability.
DIRECTORS.
J. H. BAKER, Esq. (Messrs. Siddons and Baker), Griffin Ironworks, Oldbury.
JOSEPH GREENWOOD, Esq., paper merchant, Darwen.
HENRY JORDAN, Esq., The Beacons, Chertsey, Surrey.
EDWARD HUNT, Esq., 6, Cecil-street, Strand.
J. T. RICCARTON, Esq. (Director of the Anglo-French Porcelain Company), 18, Adam-street, Adelphi, W.C.
BANKERS—The Metropolitan and Provincial Bank, 75, Cornhill.
BROKER—James Robertson, Esq., 4, Angel-court, Throgmorton-street.
SECRETARY (pro tem.)—Mr. Thomas Swan.
OFFICES—35A, MOORGATE STREET, E.C.

The Parkgwyn Tin Mining Company (Limited) has been formed to work a large and valuable mineral site situated in the parish of St. Stephen's, near St. Austell, Cornwall. This property has already been worked to a depth of 15 fms.; but at this point machinery has become necessary, and for its erection, and the complete development of the mineral lodes contained in the set, increased capital is required.

This mineral set includes three east-west tin lodes, all within a space of about 8 fms. There are also a number of north and south lodes, and several cross-courses, besides a fine decomposed iron-ore. The extent of the set is from east to west about three-quarters of a mile, and from north to south about half a mile.

The lode hitherto worked above the adit is from 4 to 6 ft. wide, and has yielded at its present depth large quantities of rich tin, and there will be immediate and increasing returns of ore as soon as machinery can be erected and the lode worked to a greater depth. The parallel east and west lodes, which also run through the entire set, show at the adit very strong indications of being rich for tin at a deeper level, and after the engine-shaft has been sunk to about 30 fms. these parallel lodes will be wrought by means of a cross-cut from the shaft, which can be done at a very trifling outlay, when the company will have a fine champion lode already provided, nearly 6 ft. wide, and two parallel lodes of equal promise, all worked by the same machinery and from the same shaft.

It is intended to erect an engine of from 30 to 40 inch cylinder, and the necessary crushing and dressing apparatus; with these appliances the company will be able to make returns of ore in about six months, as the fine run of tin ground already laid open will be immediately available, shortly after which profits may be expected.

Letters and reports have been received from several gentlemen (among whom are Wm. Richards, Esq., of Bank House, Redruth, and James Pope, of the Wheel Basset and other mines) of high standing and practical knowledge, who are well qualified to judge of the value of the mine. These reports, taken together with the present high price of tin, fully justify the directors in offering to the public what they believe to be a highly valuable property.

Applications for shares should be made to the secretary, the directors, or to the broker of the company, from whom every information, with prospectuses and forms of application for shares, may be obtained.

THE ELY-MERTHYR COLLIERY COMPANY (LIMITED).

Registered under the Joint-Stock Companies Acts, 1856 and 1857, whereby the liability of each shareholder is limited to the amount of his shares.
Capital, £25,000, in 10,000 shares, of £2 10s. each.
Deposit, 5s. per share on application, and £1 per share on allotment. No further calls to be made at less intervals than three months.

DIRECTORS.
JAMES BROWN, Esq., Mayor of Newport, Monmouthshire.
GEORGE BENNETT, Esq. (Director of the Karbitz Colliery Company, Limited), 21, Manchester-buildings, Whitehall.
Capt. J. HARRIS, 13, St. German's-terrace, Blackheath, Kent.
W. D. BUCK, Esq., merchant, Duke-street, London-bridge, S.E.
Colonel WRAGGE, Fair View, Shooter's Hill, Kent.

BANKERS—Metropolitan and Provincial Bank, 75, Cornhill, E.C.
BROKERS—Messrs. Allsops, 3, Union-court, Old Broad-street, E.C.
SOLICITOR—C. J. Eldred, Esq., 8, Great James-street, Bedford-row, W.C.
SECRETARY—Theophilus Broughton, Esq.

OFFICES—19, MANCHESTER BUILDINGS, PARLIAMENT STREET, LONDON.

This company is formed for the purpose of working an extensive and valuable coal field at Gellgryon, in the parish of Llantrisant, Glamorganshire, containing 240 acres of steam, coking, house, gas, and Cannel coal, together with ironstone, and beds of the finest fire-clay.

The lease is for 21 years, and renewable for ever (without increase of royalty or rental), at a royalty of 9d. per ton of 2520 lbs. on coal, and 3d. per ton on fire-clay.

From the annexed reports (the originals, accompanied with plans and sections of the estate, may be seen at the company's office), it will be seen that there are no less than thirteen seams of coal, of the aggregate thickness of 60 ft., and containing 18,000,000 tons; it is proposed, however, in the first place to work only the Abergorky steam coal, which would yield upwards of 1,800,000 tons of large coal from the present level, which is highly prized on account of its peculiar adaptability in its raw state to locomotive engines, and is considered equal to the best in Wales for steam navigation.

The Ely Valley Railway runs through the estate, thus preventing any necessity for way leave through any other property, as a siding of 200 yards only is required to effect a complete railway communication to the port of Cardiff, which is distant only 15 miles. In addition, it is calculated that very large returns will be realized from the Cannel coal, ironstone, and fire-clay, as they can be cheaply worked with the principal veins of coal.

The following estimate, made by an eminent engineer, shows the profit that may be expected to accrue on the capital employed. This calculation may be seen at the company's office.

The sale of 100,000 tons of coal per annum at the Dock at Cardiff (as is shown by the annexed reports of the mining engineers), will yield £42,500 0 0 that quantity for thirty years, at an average price of 5s. 6d. per ton, will yield a total of £1,275,000 0 0 Deduct cost of raising, including wages, royalty, and all other charges, £1,230,000 0 0 at 5s. 4d. per ton £15,833 6 8

Leaving £45,000 0 0 available for dividends, or 55 per cent. on the capital.

Application for shares, with a deposit of 5s. each, may be made to the bankers, the brokers, or the secretary, at the offices of the company, 19, Manchester-buildings, Parliament-street, London, S.W., where may be obtained prospectuses, with names of directors, forms of application for shares, and any further information desired.

REPORTS. Gellgryon, Sept. 7, 1860.
1.—This valuable mineral estate is situated on the side of the Ely Valley Railway, five miles from its junction with the South Wales Railway at Llantrisant Station, by which line the produce may be cheaply conveyed, either eastward to the port of Cardiff (which is within the short distance of 15 miles) or westward to the ports of Briton Ferry and Swansea (respectively distant 23 and 35 miles), or to Milford Haven; and when the Bristol and South Wales Junction shall have been completed it will open communication, without break of gauge, from Gellgryon to Plymouth, Portsmouth, Southampton, and the whole of the coast of England. A company is now constructing a narrow gauge railway from the district, forming a junction with the Taff Vale Railway, thus affording access to all the docks at Cardiff and Penarth, Staffordshire, and the midland districts, where there is an unlimited demand for coking coals.

2.—The area is 240 acres or thereabouts, completely commanding, without extra windings, properties of equal extent, lying west thereof, land-locked by Gellgryon.

3.—The section of the estate indicates the magnitude of its vast mineral resources, a great portion of which has already been proved. The several seams of coal, with the numerous veins and courses of ironstone, embraced between letters C and D in the section, have been driven to and otherwise proved. In that portion lying between the letters C and E we have, from a thorough knowledge of the stratification of the district, laid down the coals, ironstone, &c., which must exist under Gellgryon. Our opinion is fortified by the late eminent Sir R. T. De la Beche's elaborate survey of this locality; wherein he resided six months of his useful life, exploring and ascertaining the abundant mineral deposits lying under what he designated "the plum of the South Wales coal fields."

4.—The great value of this property arises from the accessible condition under which the several seams present themselves. This is mainly attributable to the estate being upon the anticlinal line of the Welsh coal field. In consequence of the argillaceous and impervious character of the intermediate rocks, all coals from the No. 3 seam down to the lowest (both inclusive) are perfectly free from water; therefore ordinary winding machinery only will be required for working the deeper coals, especially as the existing free level and cross-outs, with the workings therefrom, must completely drain the land water and water-shed.

5.—With respect to the qualities of the coal under Gellgryon, the coal shown on the section as Abergorky steam coal is eminently suited for shipment as marine and locomotive engine coal, as the extracts appended hereto sufficiently evince. The Abergorky vein at Gellgryon is undoubtedly superior in quality to the "Pentre," named in these extracts. The upper and lower groups of coals shown in the section are more easily obtainable at Gellgryon than at any other place so near the port of shipment.

6.—By basing our estimate of thickness of coal at 60 ft., which is less than the ordinary computation, the quantity will amount to 18,000,000 of tons, sufficient to endure at a daily output of 600 tons a period of 100 years.

7.—The present level is adequate to the working of 200 tons per day of steam coal for 30 years from the Abergorky seam alone, as, at the very lowest possible calculation, there is the total quantity of 1,800,000 tons of large coal in this vein lying nearly flat on the north side of the line.

N.B.—This yield is workable by means of the present adit level, and the workings on the Abergorky steam coal vein will be entirely free from water or fire-damp.

8.—Ventilating shafts on the apex of the saddle, or along either brook side, may at any time be sunk to cost £20.

9.—The stipulated quantity per diem to cover sleeping rent to lessor is only 40 tons.

10.—Knowing this property for 30 years past, and having on many occasions during that period inspected it, as well as the adjoining properties, and reported thereon—considering, likewise, the cheapness of winning and working, the extremely low royalties as compared with like works in the district, its railway facilities for transport of produce, proximity to the best port in Wales, together with its never-failing streams of water, and being situated in the midst of a thickly populated mining district—we cannot refrain from pronouncing it as unequalled in its resources and advantages by any other property of its extent in South Wales or Monmouthshire, and it is admirably adapted as a site for a first-class seaborne colliery and ironworks.

M. GILDROY STEWART, Badminton, near Bristol, } Mining Engineers, &c.
ARTHUR O. DAVIES, Newport, Monmouthshire, }

Rest Mount, York, April 15, 1861.—I have carefully examined the above colliery, and am glad to be able to state that the result of that examination is very satisfactory, and enables me to confirm the report of Messrs. Stewart and Davies in all essential particulars. The numerous beds of coal lie very favourable for working at a comparatively small cost, while the Ely Valley Railway gives a capital outlet for them. As the colliery lies within an easy distance of several good shipping ports, and is also accessible for the London market than some of the collieries which already send coals to the metropolis, there is every facility for sending the coal to good markets. The various seams amount in the

aggregate to 55 ft. of workable coals, two-thirds of which are the best steam coal. I estimate that there are not less than 18,000,000 tons of coal in Gellgryon, which extends over 240 acres; but it so happens this estate has a large frontage to the railway, and completely locks up all outlet for the land and adjoining, which is over 1000 acres, and might readily be obtained, if required, thus quadrupling the acreage. A large and very fine vein of fire-clay runs through the estate, and as it lies immediately below a rich seam of Cannel coal it can be worked at a nominal expense, as it must be worked in order to get the Cannel cheaply. There are also several veins of ironstone, but only one vein, in my opinion, would pay to work at present. The vein I allude to is, as far as I can judge, of an average thickness of 11 in.; this would pay remarkably well. No sinking will be required, save one shaft, to cut through the whole of the seams, for an air or up-cast pit, as, owing to the peculiar position of the strata, the whole of the coal can be worked from adits: 150,000 tons per annum could be easily worked, and this would give a net profit of £15,000, at the low average of 3s. per ton profit. I will conclude by saying that, in my opinion, it is a most valuable property, and will amply repay a large outlay if it were needed; but it is not necessary, as a comparatively small expenditure will put the colliery into full working order. HENRY J. McCULLOCH.

THE DOLFRW-Y-NOG MINING COMPANY (LIMITED).

MERIONETHSHIRE, NORTH WALES.
Capital, £20,000, in 20,000 shares, of £1 each.
5s. per share to be paid on application; 5s. per share on allotment.
No further call to be made without the sanction of a general meeting of the shareholders.

DIRECTORS.
CHARLES HENEAGE, Esq., 3, Cadogan-place, Belgrave-square.
THOMAS HOLROYD, Esq., 54, Upper Berkeley-street.
ROBERT KENTON, Esq., Belgrave House, Upper Holloway.
HENRY A. SANFORD, Esq., Lynton, Western Australia, and 23, Cadogan-place, Belgrave-square.
FREDERICK TWYNAM, Esq., Bishopstoke, Hants.

BANKERS—Sir Charles Price, Bart., Marryat, and Co., 3, King William-street, E.C.
BROKERS—Messrs. R. and J. Sutton, 22, Royal Exchange.
SOLICITORS—Messrs. Sutton and Ormanney, 6, Basinghall-street.
SECRETARY—Mr. William Batyue.

OFFICES—33, GREAT WINCHESTER STREET.

The existence of gold in Merionethshire, North Wales, has been an ascertained fact for a long period, and various attempts have been made to separate the precious metal from the matrix. All such efforts were, notwithstanding the richness and value of the specimens produced from this district (commercially speaking) unsuccessful, owing entirely to the imperfect means employed in extracting the gold, and it was evident that, unless an improved method were discovered, gold operations in Wales could not be remunerative.

The Vigra and Clogau Mining Company, situated in this district, taking experience by the past, recommended working for gold in January, 1861, on a new and improved plan, and the great success which has attended their operations justifies the expectations, which others have formed, of obtaining similar favourable results from other mines in which visible gold is known to exist.

The quantity of ore crushed and amalgamated at the Vigra and Clogau is stated in the Mining Journal of 9th August, 1862, to be as follows:—
JANUARY TO DECEMBER, 1861.

456 tons 15½ cwts., yielding 2935 ozs. 3 dwts. of fine gold, or 6½ ozs. of gold per ton of quartz=£10,816 17s. 2d.

JANUARY TO 30TH OF JUNE, 1862.
434 tons, yielding 3537 ozs. fine gold, or 8 ozs. of gold per ton of quartz=£13,642s. 7d.

Thus showing a steady increase in the yield of gold, the returns for the first six months of this year being greater than the produce of the whole of last year's workings. These results have enabled that company to pay dividends at the rate of 130 per cent. on their nominal capital, and their shares, with £2 15s. paid, are quoted at £20 to £25 per share. The shares of the Prince of Wales Gold Mine, also in that locality, with £3 15s. paid, are quoted at £25 to £27 per share.

The company is formed for the purpose of working the Dolfrw-y-nog Gold and Copper Mines, situated in the parish of Llanfachreth, county Merioneth, about six miles from Dolgelly, and to the west of the River Afon Wen. The set consists of Dolfrw-y-nog, Tynsimal, Bwlchrhoswen, and Rhoswen, extending over about 170 acres of land. The property is held under a lease for three years, containing covenants under which, at any time during that period, a lease for twenty-one years can be obtained, at the moderate rental of £25 per annum, merging into a royalty of one-fifth.

There are four distinct lodes running through the set, which have been opened on; one, a large copper lode, bearing east and west, from 4 to 10 ft. wide, composed of flookan, quartz, mundle, and copper. A shaft has been sunk on this lode to the depth of 12 fms. Several tons of copper ore, which required no dressing, have been raised from the shallow workings; and it is expected that, by sinking the shaft to 30 fms., a large course of copper ore will be found. Great importance is attached to the development of this lode, as it was in the flat below where the celebrated Tuff Copper Mine was discovered, from which tons of ore were obtained by burning the peat, and the water now coming from the lode being highly mineralised; these two facts indicate the existence of a large deposit of copper ore in the immediate vicinity. Gold has also been traced in it. Two lodes, bearing north and south—and the great gold lode—bearing south-east north-west underlying north-east, from 1 to 6 ft. wide, and composed of flookan, quartz, schist, copper, lead, blende, mundle, and gold. Two shafts have been sunk on this lode, to the depth of 30 fms. and levels driven along for about 30 fms.; and a shaft, called the gold shaft, from which specimens of great value and extraordinary beauty have been produced, has been sunk to the depth of 40 fms. The ground between this shaft and the south-east shaft is all untouched; it will be seen by the annexed report that visible gold exists in this part of the lode.

The geological formation of this district are the Cambrian rocks, overlaid by the Lower Silurian (ligniferous) and it has been so minutely described by Prof. Ramsay, in his communication to the Geological Society, that a few extracts from his report will be deemed sufficient:—

"When I inspected the geology of this country, the most remarkable and promising lode was the gold lode at Dolfrw-y-nog. It lies in the heart of the talcoso schist, and is composed of white saccharoid quartz, irregularly traversed by numerous small loose joints. Chlorite decomposing talcoso matter, and pink carbonate of lime, are intermingled with it. As a rule, the substance of the lode is easily shivered into fragments—a great advantage for working. On examining a heap of quartz, which lay at the mouth of the shaft, I readily saw, with the naked eye, gold in small flakes and grains, irregularly disseminated through the quartz, and one mass, in particular, was literally spangled across its surface with rich, glittering gold. Gold has also been discovered in the copper lode, about a mile further south. All of these occur in the same talcoso rocks, and it is the peculiar character of these rocks, which occur very sparingly elsewhere, that induced me to recommend Mr. Attwood to examine this ground for gold."

According to Sir Roderic Murchison,—"The most usual position of gold is in quartzose vein stones that traverse altered palaeozoic slates, frequently near their junction with eruptive rocks, whether of igneous or of aqueous origin."

This statement is corroborated by the position of the quartzose vein in the Dolfrw-y-nog and Clogau Mines.

The following is from Sir R. Murchison's "Siluria":—"Prof. Anstey who has examined the gold veins in Merioneth, has reported to me that at Dolfrw-y-nog the gold disseminated both in bands and in irregular bands, or veins, parallel to the Lower Silurian schists, lying near to the junction of a greenstone with slaty rocks. The gold is partially present to such an extent that in a small quantity removed by himself from one of these veins it yielded, upon an analysis, 60 ozs. to the ton."

Mr. T. A. Readwin, F.G.S., also states that—"By far the richest discoveries of gold have been made at the Dolfrw-y-nog, Prince of Wales, and Clogau Mines. I have extracted gold from stones from each of these mines at the rate of 300 to 400 ozs. per ton."

The following analyses have been made from the ores of the Dolfrw-y-nog Mine (see Calvert's book on the "Gold Rocks of Great Britain"):

	Ozs.	Dwts.	Grs.		Ozs.	Dwts.	Grs.
1. Galena and carbonate of manganese	—	—	—	60.	3	0	0
2. " " " "	—	—	—	a trace.	—	—	—
3. " " " "	—	—	—	4	14	0	0
4. " " " "	—	—	—	60	0	0	0
5. " " " "	—	—	—	60	0	0	0
6. Slaty stuff	1	6	8	5	18	12	12
7. Quartz with iron pyrites	10	6	12	6	2	13	13
8. Quartz with iron pyrites	3	8	12	6	2	13	13
9. Slaty pyrites	2	12	6	130	0	0	0
10. Grey stuff	—	—	—	246	8	0	0
11. Mixed ores	—	—	—	246	6	11	11
12. Quartz; no visible gold in it	—	—	—	3	2	0	0
13. Quartz	—	—	—	300	0	0	0

Considerable expense has been incurred in sinking shafts, driving levels, and proving the existence of gold, and it is estimated that the proposed capital will be amply sufficient to put the mine into complete working order, and enable the directors to bring gold to market. Ample water-power, for all purposes of the mine, can be obtained from the River Afon Wen.

Arrangements have been entered into with the lessees for the transfer of their interest in these mines for the sum of £1000 in cash and 4500 shares fully paid up, and a further amount of 4500 shares also fully paid up, to be delivered after the payment of the first dividend.

It is difficult to give any estimate of the results to be obtained; but, when it is considered that half-an-ounce of gold per ton pays in Australia and Brazil, where the cost of extraction is necessarily much higher than in Wales, and as the Clogau Mine is obtaining from 1 to 2 ozs. per ton, where no gold is visible, and 8 ozs. on the average, and at a cost of only about 8 per cent. on the returns, it is reasonable to expect a large return from the Dolfrw-y-nog Mines, from which specimens with visible gold have been obtained, giving as much as from 60 to 300 ozs. of gold per ton, and 3 ozs. 2 dwts. per ton where no gold has been visible to the naked eye.

Specimens of the gold quartz may be seen at the office of the company.

A considerable portion of the capital has been subscribed. Prospectuses, with the reports and forms of application for the remaining shares, may be obtained from Messrs. R. and J. Sutton, 22, Royal Exchange; and of the secretary, 33, Great Winchester-street, E.C.

FORM OF APPLICATION FOR SHARES.
To the Directors of the Dolfrw-y-nog Mining Company (Limited).
GENTLEMEN,—Having paid to your credit, with Sir Charles Price, Bart., Marryat and Co., the sum of £ , I request that you will allot me shares in the above company, which I agree to take (or any less number that may be allotted to me), to pay the calls that may be made upon the same, and to sign the Deed or Articles of Association when required so to do.

Name
Profession or business
Address
Date

PARTNERSHIP—MUSIC HALL AND TAVERN.—WANTED,
A PARTNER with £1200 capital, to JOIN the ADVERTISER in a MUSIC HALL and TAVERN in LONDON, established for many years. £500 of this is required to purchase the lease of premises to extend the trade. The duties of the business merely require a superintendence by the proprietor, but the incoming partner would be required to divide the active management between himself and the advertiser three days a week. The takings are £100 per week, and after paying £40 per week expenses, leaves a net profit of £60 per week, all ready money.—Apply to JAMES HUTTON, Esq., accountant, 25, Moorgate-street, London, E.C.

Landed Estates Court, Ireland.

COUNTY OF WICKLOW.
In the Matter of the Estate of HENRY LAWRENCE THOMAS THURLEY YON TOWN
OWNER; JOHN CONOLLY and WILLIAM ROBERTSON FAYLE, Petitioners.

TO BE SOLD, before the Honourable Judge Hargrave, in Court, Four Courts, Dublin, on Friday, the 7th day of November, 1862, at 10 o'clock, the COPEL, COPEL ORE, and ALL OTHER ORES, MINERAL SUBSTANCES, CLAYS, EARTHES, STONES, SLATES, ROCKS, AND ALL OTHER SUBSTANCES in the nature of MINES or MINERALS of some value, whether open or unopened, which may be found to be in, under, or upon, or through all those the TOWNLANDS of KNOCKANODE and KARRANAV, situated in the parish of CASTLEMACKADAM, barony of ARKLOW, and county of WICKLOW, held under lease, dated 1st day of May, 1860, for the term of 21 years, the 1st day of April, 1860, subject to the yearly rent of 1-18th in kind, or in cash, at the option of the mine lord, and to the usual mining covenants.

Dated this 18th day of July, 1862. HENRY FAWCETT, Chief Clerk.

OBSERVATIONS.
These mines are held under lease or licence for the term of 21 years, from the 1st day of May, 1860, at 1-18th due, in kind delivered at grass, or in cash, less all expenses incurred drawing, making merchantable, and disposing of the ores. Compensation for surface damage to be made at agricultural value only, and one-half of such compensation to be in, or to be subject to, a set-off for royalty due paid to the landlord. The whole of the lands, &c., on the two townlands, comprising together 382a. 3n. 27r. statute measure, are subject to the lessee's right to enter and search for minerals. The lessee has the exclusive right to all water-power, except that now legally used by Minahan, &c.

The Dublin, Wicklow, and Wexford Railway, now in course of construction, passes through them.

The townland of Knockanode, where the principal mining operations have been carried on, adjoins on its south boundary the mines of the Wicklow Copper Company, on the east the Tigroney and Cronebane Mines, and is separated only by latter from the mining site of the Connore Mining Company.

There are two distinct mines—the South and the North Mine—opened on Knockanode which can be worked by water-power alone.

These mines have been favourably reported on by Captain CHARLES THOMAS, of Dolcoath Mine, Camborne, Cornwall; JESSE HITCHING, Esq., and FRANCIS LEAH, of which reports may be seen at the office of the solicitors for the petitioners, owner, and of the said owner and the petitioner, W. R. FAYLE, as hereafter referred to.

For rentals and further particulars, apply at the Landed Estates Court, Dublin; or to D. and T. FITZGERALD, Solicitors for the Petitioners, having care of the sale, 20, St. Andrew-street.

WM. R. FAYLE, one of the petitioners, 55, Townsend-street, Dublin; and to FREDERICK L. FLOOD, Solicitor for the Owner, 2, Dame-street, Dublin; and to HENRY VON USTER, Esq., the owner, "The Meetings," Over county of Wicklow.

In the Court of the Vice-Warden of the Stannaries.
Stannaries of Cornwall.

IN RE CAMBORNE VEAN AND WHEATLEY KIRK.
TO BE SOLD, pursuant to an Order made in a Cause Pike v. R. and Others, dated the 4th day of July last, BY PUBLIC AUCTION, Registrar's Office, Truro, on Wednesday, the 3d day of September next, at Twelve o'clock precisely.

38 (4600ths) SHARES of the said defendant, Peter Eddy.
Of and in the said MINE.

HODGE, HOCKIN, AND MARRACK, Solicitors, Truro (Agents for S. T. G. Downing, Plaintiff's Solicitor, Bude).
Dated Registrar's Office, Truro, August 20, 1862.

TO ENGINEERS, MACHINE MAKERS, FORGE MASTERS, BROKERS, AND OTHERS.
On MONDAY NEXT, AUGUST 25, 1862, at Eleven o'clock prompt.

MR. WHEATLEY KIRK is favoured with instructions Messrs. Fairbairn and Sons to SELL, on Monday next, Aug. 25, 1862, at 10 o'clock A.M., on the premises of the forge department, Canal-street, Ancoats, Manchester, the following MACHINERY, in consequence of alterations at their works:—

ONE 20 tons STEAM HAMMER, 4 ft. stroke, piston 4 in. diameter; about 3 blocks for ditto.

TWO VERTICAL BOILERS, 24 ft. long by 5 ft., with chimney and dampers also the following mountings to each boiler:—2 5 in. safety-valves, 1 5 in. stop 1 2 in. vacuum valve, 1 5 in. spring balance safety-valve, 2 3/4 in. safety-valve, 1 of each, 3 gauge taps, glass water gauge, 1 1/2 in. steam trap.

The following pipes and connections:—40 ft. of 2 in. piping, 60 ft. of 5 in. cast steam piping, with flanges, elbows, and junctions; 15 ft. of 4 in. wrought-iron piping, with stop valve, and expansion joint of brass and copper; 15 ft. of exhaust piping with stuffing box, &c.

ONE DONKEY PUMPING ENGINE, with 2 1/2 in. ram.

ONE SCOURING MACHINE, fast and loose pulleys, 3 ft. 6 in. diameter.

ONE LEVER SHEARING MACHINE and balance weight, with connecting wire 15 inches.

Orders to view, and full particulars, may be had on application at the chambers of Mr. WHEATLEY KIRK, Albert-street, St. Mary's, Manchester.

TUESDAY, AUG. 26, 1862.—MINING MATERIALS FOR SALE.
MESSRS. LITTLE AND NEWTON are instructed to SELL BY PUBLIC AUCTION, on Tuesday, the 26th day of August, 1862, at 10 o'clock precisely, at POLGAZE MINE, in the parish of Wendron, the whole of the MINING MATERIALS, comprising:—

ONE 30 in. cylinder STEAM ROTARY ENGINE, 9 ft. stroke in cylinder and out, with steam chest, fly-wheel 22 ft. diameter (11 tons), 2 wrought-iron fly-shafts, wrought-iron sweep rod, stamps' axle for 12 heads, and a 10 ton BOILER.

19 ft. 8 in. pumps. 1 balance beam, complete. 1 V ditto and stand. 1 1/2 in. ditto. 15 fms. 1 1/2 in. bucket rods. 2 7 in. bucket prongs, with brass 6 in. 5 in. rod plates. 2 pairs 5 in

VALUABLE INFORMATION TO INVESTORS, COMPANIES, &c.
THE SOUTH WALES MINE AGENCY.—South Wales is a colossus of mineral wealth, but its resources have not been fully developed. The Agency has been established to promote the development of the coal, iron, and other minerals of the district. It has a large staff of experienced men, and is in a position to supply parties with reliable information on all matters connected with the mining industry. It also has a large stock of maps and plans, and is in a position to supply parties with all the information they require. It is a most valuable agency for all parties interested in the mining industry.

WILMOUTH CONSOLS COPPER, SILVER-LEAD, AND GOLD MINING COMPANY (LIMITED).
The Company has been formed for the purpose of developing and extensively working the copper, silver-lead, and gold mines of the district. It has a large staff of experienced men, and is in a position to supply parties with reliable information on all matters connected with the mining industry. It also has a large stock of maps and plans, and is in a position to supply parties with all the information they require. It is a most valuable agency for all parties interested in the mining industry.

ISLE OF MAN SLATE AND FLAG COMPANY (LIMITED).
The Company has been formed for the purpose of developing and extensively working the slate and flag mines of the district. It has a large staff of experienced men, and is in a position to supply parties with reliable information on all matters connected with the mining industry. It also has a large stock of maps and plans, and is in a position to supply parties with all the information they require. It is a most valuable agency for all parties interested in the mining industry.

JOHN TAYLOR, F.G.S., &c.
Member of Council of Manchester Geological Society; Author of "Coal Measures of Great Britain," &c.
The Company has been formed for the purpose of developing and extensively working the slate and flag mines of the district. It has a large staff of experienced men, and is in a position to supply parties with reliable information on all matters connected with the mining industry. It also has a large stock of maps and plans, and is in a position to supply parties with all the information they require. It is a most valuable agency for all parties interested in the mining industry.

THE CORK-CARPET COMPANY (LIMITED).
The Company has been formed for the purpose of developing and extensively working the cork-carpet mines of the district. It has a large staff of experienced men, and is in a position to supply parties with reliable information on all matters connected with the mining industry. It also has a large stock of maps and plans, and is in a position to supply parties with all the information they require. It is a most valuable agency for all parties interested in the mining industry.

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RAILWAY WAGONS.—WILLIAM A. ADAMS AND CO.,
MIDLAND WORKS, BIRMINGHAM.
BROAD AND NARROW GAUGE COAL AND IRONSTONE WAGONS.
IN STOCK—FOR SALE OR HIRE.

RAILWAY WAGONS.—WILLIAM HARRISON AND CAMM
HAVE ON HAND RAILWAY, COAL, COKE, AND MINERAL WAGONS.
ON SALE OR HIRE.
AT THE ROTHERHAM WAGON WORKS, MASBRO'.

THE METROPOLITAN RAILWAY CARRIAGE AND WAGON COMPANY (LIMITED), SALTLEY WORKS, BIRMINGHAM.
(Successors to JOSEPH WRIGHT AND SONS, Railway Carriage and Wagon Builders, and Contractors).
RAILWAY CARRIAGES AND WAGONS TO BE LET UPON HIRE.
LONDON OFFICE.—2, BRIDGE STREET, WESTMINSTER, S.W.

THE BIRMINGHAM WAGON COMPANY (LIMITED) HAS
RAILWAY WAGONS FOR HIRE.
Apply to the SECRETARY, 3, Newhall-street, Birmingham.

TO RAILWAY COMPANIES, CONTRACTORS, COAL AND IRONMASTERS, WAGON BUILDERS, &c.—The BEST and CHEAPEST LOCOMOTIVE GREASE IS MANUFACTURED BY BUCKNELL, CHESTERFIELD. Only one quality made. A trial is solicited. References given to some of the principal coal owners in the district. Sample casks from 2 cwt. upwards. Chesterfield, February 6, 1862.

WILLIAM RICHARDSON AND SON, ENGINEERS
AND CONTRACTORS FOR THE ERECTION OF COAL, OIL, AND HYDRO-CARBON GAS WORKS. Also of APPARATUS for the DISTILLATION of PEAT and MINERAL OILS.
OFFICES AND STORES, 41, MERIDON STREET, BIRMINGHAM.

JOB TAYLOR AND CO., SWAN FOUNDRY
OLDBURY, NEAR BIRMINGHAM.
SOLE PROPRIETORS OF HINTON'S PATENT CUPOLA, which CONSUMES FIFTY PER CENT. LESS COKE than any cupola yet invented. MAKERS OF ALL KINDS OF MACHINERY connected with the GRINDING and TEMPERING of EVERY SORT OF CLAY or MARL, and for the MANUFACTURE of BRICKS, TILES, DRAIN PIPES, &c. Also, of HIGH and LOW PRESSURE STEAM ENGINES of any dimensions, and of GENERAL MACHINERY.

SHORTBRIDGE, HOWELL, AND CO., HARTFORD STEEL
WORKS, SHEFFIELD, SOLE MANUFACTURERS OF HOWELL'S PATENT HOMOGENEOUS METAL PLATES for BOILERS, LOCOMOTIVE FIRE BOXES, and TUBES, COMBINING the STRENGTH of STEEL with the MALLEABILITY of COPPER. RUSSELL AND HOWELL'S PATENT CAST STEEL TUBES. McCONNELL'S PATENT BOLLER RAILWAY AXLES.—For prices and terms, apply to SHORTBRIDGE, HOWELL, AND CO., Hartford Steel Works, Sheffield; or Messrs. HARVEY AND CO., 12, Haymarket, London.

GEORGE WHITEHOUSE (late James Colley and Sons),
MANUFACTURERS OF BOLSTER PINS and BOXES, BOLTS and NUTS, WOOD SCREWS, LIFTING JACKS, RAILWAY SPIKES, RIVETS, and EVERY DESCRIPTION of RAILWAY FASTENINGS.
HOPE WORKS, WEST BROMWICH. (ESTABLISHED 1815.)
LONDON AGENTS.—Messrs. R. and W. PULLING, 10, NEW BROAD STREET MEWS, E.C.

Adopted by the Governments of Great Britain, Spain, Denmark, Russia, Brazil, East and West Indies.

EASTON'S PATENT BOILER FLUID,
FOR REMOVING AND PREVENTING INCORUSTATION IN STEAM BOILERS, LAND AND MARINE.
P. S. EASTON AND G. SPRINGFIELD, Patentees and Sole Manufacturers, 37, 38, and 39, WAPPING WALL, LONDON, E.
Or of their Agents in the principal towns of Great Britain and the Colonies.

BELL BROTHERS beg to intimate that, having become SOLE LICENSEES in the United Kingdom of PROF. DEVILLE'S METHOD OF PRODUCING PURE ALUMINIUM, they are now in a POSITION to SUPPLY, from their works here, both this metal and its compound with copper, known under the name of ALUMINIUM BRONZE.—Newcastle-on-Tyne, September, 1860.

TO SPELTER MANUFACTURERS.—The Directors of the GENERAL MINING COMPANY FOR IRELAND (LIMITED) APPRISE ALL ZINC SMELTERS that they are now in a POSITION to FURNISH in quantity REGULAR SUPPLIES of CALAMINE, containing a high percentage of metal. The great deposit of calamine on the property of the company is the only one of magnitude known in the United Kingdom, but it is precisely similar in character to those in Belgium and Prussia. The ore is carefully dressed by the most approved machinery, and will be sold either raw or calcined, at the option of the purchaser. The quality of the spelter made from this ore is of the first-class, and is very superior to that manufactured from blends. By order, EDWARD MORAN, Sec. Offices, 29, Westmoreland-street, Dublin.

TO COLLIERY PROPRIETORS, CAPITALISTS, AND OTHERS.—TO BE DISPOSED OF, BY PRIVATE CONTRACT, THE LEASE of the VERY VALUABLE BEDS of HARD and SOFT COALS lying underneath about FIVE HUNDRED ACRES of LAND at BRINSLEY, in the county of NOTTINGHAM. The coal has been well ascertained, and is known to be of a very superior quality. It has also been most favourably reported on, in every respect, by some of the most eminent mining engineers of the district.

There is complete and easy communication by means of a private branch railway connecting the colliery with the Erewash Valley Railway and the Cromford Canal at Stoneyford; and there are materials and an engine on the spot, necessary for proceeding with the works forthwith. The above colliery is exceedingly well situated in the far-famed valley of the Erewash, in the immediate vicinity of Codnor Park and other ironworks; and, with every facility and means of transit, is considered to present an opportunity for a safe and profitable investment rarely to be met with. For particulars apply to Mr. ROYSTON, Stoneyford Colliery, near Alfreton.

IMPORTANT COAL FIELD.—TO BE LET, ON LEASE, the VALUABLE BEDS or SEAMS of COAL, including the well-known STANLEY MAIN and HAIGH MOOR BEDS, underlying some 300 acres of STANLEY HALL ESTATE, near WAKEFIELD. The estate has excellent water communication, as it adjoins the Aire and Calder Canal.—Proposals to be sent to Mr. JAMES WITHAM, solicitor, Wakefield, to whom, or to Messrs. BROWN and JEFFCOCK, mineral surveyors, of Barnsley and Sheffield, application for any information should be made.

EWGLWYSILAN, CAERPHILLY, GLAMORGANSHIRE.—TO BE LET, on lease, within a short distance of the port of Cardiff and the Rhymney Railway, a COAL FIELD, containing about ONE HUNDRED AND EIGHTY ACRES, having valuable seams of coal of excellent quality beneath.—Particulars may be had, and a plan of the property seen, on application to R. W. HALL, Esq., 37, Great George-street, Westminster, S.W.

FOR SALE, a 100 in. cylinder ENGINE, in fine order, good as new. Cheap.—Apply at No. 184, Gresham House, Old Broad-street.

FOR SALE, a splendid nearly NEW 30 in. cylinder STEAM PUMPING ENGINE, with 10 ton BOILER, very bright, and in perfect order.—Apply to Mr. JAMES HOLLOW, Leland, Hayle.

SWAN ROPE WORKS.
WIRE ROPE FOR MINES, &c.—The SUPERIOR QUALITY of our manufacture was fully proved at a public test instituted by another manufacturer on October 29, 1860, on which occasion our ropes were found to be the STRONGEST of all the TWELVE SAMPLES from different makers then tested, as reported in the papers of the day.
GARNOCK, BIBBY, AND CO., HEMP AND WIRE ROPE MANUFACTURERS, LIVERPOOL.
FLAT and ROUND STEEL, IRON WIRE, and HEMP ROPES.
GUIDE ROPES, SIGNAL STRAND, &c.

CORNISH BORER STEEL.—Upwards of ONE HUNDRED AND SIXTY MINES are SUPPLIED with this STEEL, and the DEMAND for it is RAPIDLY INCREASING.—For terms, apply to R. MURPHY and Co., Forest Steel Works, near Coleford, Gloucestershire.

CYANOGEN STEEL, CAST STEEL, SHEAR STEEL, and IMPROVED FOREST L BLISTER STEEL supplied to order by ROBERT MURPHY and Co., Forest Steel Works, near Coleford, Gloucestershire. Address to the Works, Coleford.

TO COAL OWNERS AND COKE BURNERS.
MACKWORTH'S PATENT COAL WASHER, OR PURIFIER.—This MACHINE will EXTRACT the SHALE and ALL HEAVY IMPURITIES from SMALL COAL at a COST of TWOPENCE PER TON.—For particulars and references, apply to the makers, A. and T. FAY, Temple-gate Works, Bristol; or to Mr. Jos. RIDER, Basinghall-street, Leeds.

EDWARDS'S PATENT MINERAL ORE AND COAL WASHING MACHINE.—This is by far the MOST ECONOMICAL, as well as the MOST PERFECT MACHINE MADE. Each machine is capable of washing 25 to 50 tons per diem, according to quality.—Full particulars, testimonials, &c., may be obtained from E. EDWARDS, Esq., C.E., 1, York-buildings, Adelphi, where a working model may be seen.

ZENNER'S ROTATING FRAMES have now been for several years EXTENSIVELY USED both in the LEAD MINES in the NORTH OF ENGLAND, and the TIN MINES of CORNWALL, and have established a reputation for saving labour and producing more ore, and in a more concentrated form, than any other frame or machine. INSTANCES of their VALUE.—A lead mine having turned poor, the manager judiciously turned to his waste heaps, and the profit made out of them by means of the rotating frames kept the mine working until it cut rich again. The adoption of the rotating frames have materially contributed to bring a large tin mine into the Dividend List again, whose dividends had been for some years in abeyance. For information and licenses, apply to D. ZENNER, Newcastle-upon-Tyne; or to Mr. EDWARD BOLLARD, of Redruth, agent for Cornwall.

BEDFORD IRONWORKS, TAYSTOCK.
NICHOLLS, WILLIAMS, AND CO. have generally a GOOD STOCK of SECOND-HAND MINING MATERIALS FOR SALE. They also MANUFACTURE STEAM ENGINES of every description on the newest principle. Castings and wrought-iron work made at the shortest notice. Machinery sent to all parts of the world. Steam boilers and chains warranted of the best description.

WATER PRESSURE ENGINES.
WILLIAM J. SMITH, ENGINEER, BELMONT, NEAR DURHAM.
Begs most respectfully to CALL the ATTENTION of LEAD MINE PROPRIETORS and OTHERS to his IMPROVED WATER PRESSURE (HYDRAULIC) ENGINES, which are ADAPTED for both SURFACE and UNDERGROUND OPERATIONS. The cylinder is placed horizontal, which, with winding drum and pumping apparatus, are fitted on strong cast-iron bed plates, bolted on Mallet timber foundation frame. They are made from the very best material, and extra strong in all their parts, fitted with improved slide pistons, slot link motion for reversing, and can be managed by any ordinary workman. The above engines have been at work pumping and winding in several of the lead mines of Alston Moor, Cumberland, during the last twelve years, and are giving the utmost satisfaction. Prices and full particulars may be obtained on application, and contracts undertaken by the above for the erection and completion of those engines in any part of the kingdom, guaranteeing the same for any reasonable period.

CREASE'S PATENT EXCAVATING MACHINERY,
FOR SUPERSEDING THE SLOW AND EXPENSIVE USE OF MANUAL LABOUR IN SINKING SHAFTS, DRIVING LEVELS, TUNNELLING, &c., is guaranteed to drive through any rock of average hardness at a minimum rate of 1 in. per diem, and to sink shafts at the rate of 2 fms. in three days. Mr. CREASE will undertake contracts for sinking shafts, driving levels, &c., at an enormous reduction of time and great saving in cost. Applications to be addressed to Mr. GEORGE T. CURTIS (sole agent), 17, Gracechurch-street, London, E.C. By providing the power of calculating the time and cost to explore a certain depth and extent of ground, speculation in mining will be assimilated to commercial pursuits, with this unmistakable advantage—that when the ground has been once carefully and judiciously selected, and operations properly and systematically carried out for its development, there would be far less chance of unsatisfactory results than are met with by merchants and manufacturers in the usual routine of their business. As this important invention must beneficially interest the landowners, mine proprietors, merchants, and miners, we opine it will meet with immediate adoption.—Mining Journal.

NEW COMBINED TURBINE, WINDING, AND PUMPING MACHINERY,
MANUFACTURED BY GEORGE LOW, MILGATE IRONWORKS, NEWARK-UPON-TRENT. Who respectfully begs to bring the above to the notice of the mining public, as an exceedingly cheap and easy method of applying water-power for the above purposes. The TURBINE, WINDING, AND PUMPING MACHINERY are all fixed complete to one strong cast-iron bed plate, which can be placed in any situation without pit or excavation, and any height not exceeding 33 ft. from bottom of fall, the supply and suction pipe being all that is required to be connected to it, and can be brought in any direction. This combined machine can be easily removed when necessary. G. Low begs also to state that the TURBINE is the most efficient and the cheapest method of applying water-power for mining purposes. MANUFACTURER OF WINDING, PUMPING, CRUSHING, STAMPING MACHINERY, WINDING ENGINES, WATER WHEELS.

HALL AND WELLS, PATENTEES AND MANUFACTURERS OF SUBMARINE TELEGRAPH CABLES, &c.—TELEGRAPH CONDUCTORS INSULATED WITH INDIA RUBBER at £5 per mile and upwards, PARTICULARLY ADAPTED FOR MINING PURPOSES. For particulars as to price of cores, cables, &c., can be had on application at 60, Aldermanbury, City, E.C.; and Steam Mills, Mansfield-street, Borough-road, Southwark, S.E. Copper wire covered with silk, cotton, or any other material, to order.

PATENT BITUMINIZED GAS, WATER, AND DRAINAGE PIPES.—These PIPES POSSESS all the PROPERTIES NECESSARY for the CONVEYANCE of GAS and WATER, and also for DRAINAGE PURPOSES—viz., GREAT STRENGTH, GREAT DURABILITY, and PERFECT IMMOBILITY, and being non-conductors are not affected by frost, like metal pipes. They are proved to resist a pressure of 220 lbs. on the square inch (equal to 500 ft. head of water), are only one-fourth the weight, and considerably cheaper than iron pipes. They are made in 7 ft. lengths, and the joinings are simple and inexpensive. These pipes have been in use in France, Spain, and Italy nearly three years, where the demand for them is very great. The opinions of the press on a public test at the Houses of Parliament, before a large number of engineers and other scientific gentlemen, may be had, with further particulars, at the office of the company, on application to Mr. ALEX. YOUNG, 14a, Cannon-street, London, E.C., where sample pipes may be obtained for trial.

JOSEPH KAYE HAMPSHIRE'S NEW PATENT SAFETY CAGE, with DISCONNECTING CATCH, for the PREVENTION of ACCIDENTS to LIFE and PROPERTY IN COAL and OTHER MINES. The patentee has the satisfaction of stating that he has made arrangements which will enable him to supply his safety cage and catch at the shortest notice, and at a very moderate price, calculated according to size and weight. Apply, Whittington Collieries, near Chesterfield, where the same may be seen daily at work. A model of the above is in the International Exhibition, Class 1, No. 136, Eastern Annex.

PATENT SAFETY FUSE.—THE GREAT EXHIBITION PRIZE MEDAL was AWARDED to the MANUFACTURERS of the ORIGINAL SAFETY FUSE, BICKFORD, SMITH, DAVEY, and PRYOR, who beg to inform Merchants, Mine Agents, Railway Contractors, and all persons engaged in Blasting Operations, that, for the purpose of protecting the public in the use of a genuine article, the PATENT SAFETY FUSE has now a thread wrought into its centre, which, being patent right, infallibly distinguishes it from all imitations, and ensures the continuity of the gunpowder. This Fuse is protected by a Second Patent, is manufactured by greatly improved machinery, and may be had of any length and size, and adapted to every climate. Address.—BICKFORD, SMITH, DAVEY, and PRYOR, Tuckingmill, Cornwall.

CHARLES DAVEY AND CO., SAFETY FUSE MANUFACTURERS, ST. HELEN'S JUNCTION, LANCASHIRE.

ASSAYS AND ANALYSES OF EVERY DESCRIPTION Conducted by JOHN MITCHELL, F.C.S., M.G.A. (late Mitchell and Rickard), Author of "Manual of Practical Assaying," "Metallurgical Papers," &c. All communications and samples to be addressed (free) to Mr. MITCHELL, care of Mr. Bateman, 28, Moorgate-street, London, E.C.

TO INVENTORS.—ALL INTENDING PATENTEES should PROCURE the PRINTED INFORMATION regarding PATENTS, their COST and the MODE of PROCEDURE to be adopted, ISSUED GRATIS by the GENERAL PATENT COMPANY (LIMITED), 71, FLEET STREET, LONDON. R. MARSDEN LATHAM, Sec.

ACCIDENTS ARE UNAVOIDABLE!
Every one should therefore provide against them. THE RAILWAY PASSENGERS ASSURANCE COMPANY Grant Policies for Sum from £100 to £10,000, Assuring against ACCIDENTS OF ALL KINDS. An annual payment of £3 secures £1000 in case of DEATH by ACCIDENT, or a weekly allowance of £5 to the assured while laid up by injury. Apply for forms of proposal, or any information, to the Provincial Agents, the Booking Clerks at the Railway Stations, Or to the Head Office, 64, CORNHILL, LONDON, E.C. £102,817 have been paid by this company as Compensation for 56 fatal Cases, and 5041 Cases of personal injury. THE SOLE COMPANY privileged to issue RAILWAY JOURNEY INSURANCE TICKETS, costing 1d., 2d., or 3d., at all the Principal Stations. Empowered by Special Act of Parliament, 1849. 64, Cornhill, E.C. WILLIAM J. VIAN, Sec.

NEW CALCULATING MACHINE.—This ingenious invention is a COMBINATION of the SLIDE RULE and the READY RECKONER, and is ADAPTED for COMPUTING the VALUE of QUANTITY, as also for WORKING COSTS.—Sold by the inventor, R. DUNLAP, accountant, Works of the Governor and Company of Copper Miners, Cwm Avon, Talbach, Glamorganshire. Price 1s. 6d., or by post 1s. 7d. in stamps.

TO MINE ADVENTURERS, MERCHANTS, HOTEL KEEPERS, AND OTHERS. Now ready, strongly bound in cloth boards, adapted for the pocket, price 1s. 6d., or post free for 20 stamps, a second edition, with improvements, and corrected throughout.

THE CORNWALL AND DEVON MINING DIRECTORY, CLASSIFIED IN DISTRICTS, WITH AN ALPHABETICAL INDEX, And arranged in the following order:—Names of Mines—Number of Shares—Produce—Names and Residences of the Purveyors and Managers—List of Agents and Engineers' Names—Pay-days—Offices of Reference in London and elsewhere, &c.—Also, Lists of Copper Ore Buyers, their Cornish Agents and Sample Takers—Lead Ore Buyers and address—Tin Smelting Companies—Useful Rules, Tables, &c. Compiled by J. WILLIAMS, Hayle. London: W. Kent and Co., 21, 51, and 52, Paternoster-row; the MINING JOURNAL office, 26, Fleet-street, E.C.—Truro: Heard and Sons.—Redruth: J. Tregeakins.—Camborne: T. T. Whear.—Penzance: Beare and Son, E. Rowe.—Hayle: Banfield Brothers; and all booksellers.

THE PORCHESTER MARCH. Just published, price 3s., post free, Composed and arranged by HENRY GIBSON, Esq., Composer of the "Allied Waits," &c. Mr. Gibson was honoured by the Empress of the French presenting him with her likeness, most handsomely set, in 1855, and a copy of her letter is printed in the fly-leaf. The "Portchester March" can be obtained at the MINING JOURNAL office, 26, Fleet-street, London, where orders from the country may be addressed. *An allowance made to schools.

DR. SMITH has just published a free edition of his valuable work the PRIVATE MEDICAL FRIEND (116 pages), on the Self Cure of Nervous Debility, Loss of Memory, Dimness of Sight, Lassitude, &c., resulting from the errors of youth. Sent post free to any address, on receipt of a directed envelope, enclosing two pence stamps.—Address, Dr. SMITH, 8 Burton-crescent, Tavistock-square, London, W.

THE MINING SHARE LIST.

DIVIDEND MINES.

Shares.	Mines.	Paid.	Last Pr.	Bus. done.	Last Call.
1000	Alberley Edge (Cheshire) [L.]	10 0 0	60	..	17 18 6 0 10 May, 1882
4000	Bedford United (copper), Tavistock	2 6 8	..	..	12 15 0 0 2 June, 1882
240	Bosconan (tin), St. Just	20 10 0	60	..	35 10 0 0 2 June, 1882
300	Botallack (tin, copper), St. Just	21 5 0	250	..	44 15 0 0 4 Aug, 1882
1000	Carn Brea (copper), St. Just	15 0 0	72	..	273 10 0 0 2 Feb, 1882
240	Corn Brea (copper), St. Just	17 0 0	81	..	9 0 0 0 4 April, 1882
2450	Cook's Kitchen (copper), Illogan	17 0 0	31	27 29	1 7 0 0 0 7 May, 1882
256	Copper Hill (copper), Redruth	48 0 0	95	70 72 1/2	7 0 0 0 2 10 May, 1882
19000	Copper Miners of England	25 0 0	25	..	7 1/2 per cent. Half-yearly
350000	Drake Moor (copper), St. Just	100 0 0	24	..	1 12 0 0 0 10 July, 1882
1065	Creaghwaite and Penkelt, St. Columb	8 0 0	81	..	7 13 0 0 0 10 July, 1882
867	Cwm Eryn (lead), Cardiganshire [L.]	7 10 0	21	..	7 13 0 0 0 10 July, 1882
128	Cwmystyngil (lead), Cardiganshire	60 0 0	200	..	229 10 0 0 4 May, 1882
200	Darwin Mines (sil.-lead), Durham	300 0 0	180	..	147 0 0 0 0 June, 1882
1024	Devon Gt. Con. (copper), Tavistock	1 0 0	450	440 460	807 0 0 0 0 July, 1882
354	Dolcoath (copper), Camborne	128 17 6	600	..	679 10 0 0 7 Aug, 1882
12800	Drake Walls (tin, copper), Calstock	2 1 0	1	198 218	0 15 0 0 1 6 June, 1882
3000	Dyniwid (lead), Wales	12 6 0	10	..	0 12 0 0 2 6 July, 1882
512	East Basset (copper), Redruth [S.E.]	2 14 6	47	46 48	3 17 6 0 17 6 July, 1882
8144	East Caradon (copper), St. Austell	32 0 0	45	..	83 10 0 0 1 0 June, 1882
200	East Dore (tin, copper), Pool, Illogan	24 5 0	420	..	310 0 0 0 2 10 June, 1882
2048	East Wheal Grylls (tin, copper), Gernoe	10 10 0	23 1/2	13 1/2	0 4 0 0 0 1 July, 1882
7000	Foxdale (lead) Isle of Man [L.]	25 0 0	36	..	..
8000	Frank Mills (lead), Devon	3 18 6	4	..	0 16 0 0 2 0 Mar, 1882
4000	Great South Tolgus [S.E.], Redruth	14 6 0	3 1/2	4	2 10 0 0 10 July, 1882
1798	Great Wheal Fyfe (tin), Redruth	19 6 0	27	26 27	1 17 6 0 0 5 Mar, 1882
1908	Great Wheal Fyfe (tin), Redruth	40 0 0	3 1/2	..	0 3 0 0 1 6 Mar, 1882
140	Gunn's Lake (Cliffers' Adit)	0 2 0	3 1/2	..	19 15 0 0 1 15 June, 1882
1024	Herodotus (id.), near Liskeard [S.E.]	8 10 0	43	42 43	7 10 0 0 15 Sept, 1882
1000	Hibernian Mining Co. (copper), Wales	18 15 0	110	..	2 0 0 0 2 0 June, 1882
400	Isaburra (lead), Cardiganshire	4 10 0	10 1/2	10 1/2	92 10 0 0 0 Aug, 1882
9000	Marke Valley (copper), Cardigan	10 0 0	10 1/2	10 1/2	14 7 11 0 7 Dec, 1882
1800	Miners Mining Co. (L.), (id.), Wrexham	10 0 0	10 1/2	10 1/2	18 10 7 10 10 April, 1882
30000	Mining Co. of Ireland (copper), Conn.	4 0 0	25	..	0 3 6 0 0 1 Sept, 1882
400	New Birch Tor and Viller Con. (tin)	1 6 0	2 1/2	..	0 10 0 0 2 6 May, 1882
6000	North Downs (copper), Redruth	2 3 4	3 1/2	..	0 10 0 0 10 Mar, 1882
1366	North Grambler (copper), Redruth	2 7 6	6	..	0 10 0 0 10 Mar, 1882
8000	Orshead (lead), Flintshire	0 8 0	1 1/2	..	0 10 0 0 10 Mar, 1882
6400	Parva Mines (copper), St. Austell [S.E.]	1 2 6	5	..	36 12 6 0 0 10 June, 1882
300	Parys Min. (copper), Anglesey [L.]	60 0 0	..	..	6 19 6 0 0 10 Dec, 1881
1773	Polberro (tin), St. Agnes	10 4 7	42	40 42	64 0 0 1 0 May, 1882
1120	Providence (tin), St. Austell	2 16 0	43 1/2	43 1/2	0 6 0 0 3 0 June, 1882
8000	Rosewell Hill and Ransom United	2 16 0	43 1/2	43 1/2	1250 0 0 100 0 Quarterly
16	Rosewell Hill (lead)	50 0 0	..	..	381 0 0 0 2 0 June, 1882
612	South Caradon (copper), St. Austell [S.E.]	1 5 0	360	340 350	2 0 0 0 2 0 June, 1882
512	South Tolgus (copper), Redruth, Cornwall	8 0 0	45	35 40	2 0 0 0 1 0 July, 1882
496	S. Wh. Frances (copper), Illogan [S.E.]	18 15 0	107 1/2	109 102 1/2	9 15 0 0 0 10 June, 1882
280	Spearhead Moor (tin, copper), St. Just	8 0 0	32	..	485 10 0 0 10 Aug, 1882
240	Tamar Con. (sil.-lead), Beeralston [S.E.]	4 10 0	19 1/2	19 1/2	5 6 0 0 2 6 Jan, 1881
6000	Tinctor (copper), Pool, Illogan [S.E.]	9 0 0	11	10 1/2	11 13 6 0 0 0 July, 1882
1000	Trumpet Con. (tin), near Helston	11 10 0	..	..	11 0 0 0 2 0 Mar, 1882
4200	Vigna and Clogau (copper) [L.]	2 15 0	42	43 1/2 45	4 12 6 0 1 0 July, 1882
124	Wendron Con. (tin), Wendron	11 13 10	11	..	8 15 0 0 1 0 Jan, 1881
6000	West Basset (copper), Illogan [S.E.]	1 10 0	13	..	14 10 0 0 0 0 June, 1881
40	West Burton (tin), Redruth	10 0 0	13	..	100 11 3 0 0 0 Feb, 1882
1644	West Caradon (copper), Liskeard [S.E.]	6 0 0	34	30 32 1/2	0 19 0 0 0 3 May, 1882
4400	West Fowey Con. (tin and copper)	7 10 0	3 1/2	..	2 19 6 0 2 19 May, 1882
1024	West Penryn (copper), Camborne [S.E.]	47 10 0	240	235 245	358 0 0 0 5 0 Aug, 1882
512	Wheal Basset (copper), Illogan [S.E.]	5 2 0	90	85 87 1/2	88 10 0 0 2 0 Aug, 1882
256	Wheal Buller (copper), Redruth [S.E.]	8 0 0	52 1/2	..	929 0 0 2 0 Mar, 1881
3000	Wheal Clifton Amalgamated (copper), Gwennap	30 0 0	24	23 24 xd.	22 0 0 0 0 0 June, 1882
112	Wheal Fyfe (copper), Redruth	50 0 0	25	..	2400 10 0 0 0 Feb, 1881
1024	Wheal Hearn (tin), St. Austell	9 13 8	17 1/2	..	0 5 0 0 0 5 May, 1882
1024	Wheal Kitty (tin), St. Austell [S.E.]	1 7 2	11 1/2	10 11	8 10 0 0 10 April, 1882
512	Wheal Jane (sil.-lead), Camborne	8 10 0	16	..	18 10 0 1 0 Mar, 1882
4800	Wheal Ludoct (lead), St. Austell	2 10 0	12 1/2	9 1/2 10	1 12 0 0 4 0 Oct, 1881
896	Wheal Margaret (tin), St. Austell [S.E.]	17 17 6	44	41 43	72 15 0 0 1 10 May, 1882
100	Wheal Mary (tin), Liskeard [S.E.]	36 2 6	40	..	284 17 6 0 4 0 May, 1882
1024	Wheal Owles (tin), St. Austell, Cornwall	7 0 0	14	15 17	65 17 0 0 0 10 June, 1882
396	Wheal Seta (tin, copper), Camborne	68 10 0	140	142 147 1/2	363 3 0 0 0 Aug, 1882
1040	Wheal Trelawny (sil.-lead), Liskeard [S.E.]	5 17 0	16	16 1/2 16 1/2	45 12 6 0 10 Aug, 1882
5000	Wicklow (copper) [L.]	5 0 0	42	41	43 17 6 0 2 0 Oct, 1881

* Dividends paid every two months. † Dividends paid every three months.

MINES WITH DIVIDENDS IN ABEYANCE.

Shares.	Mines.	Paid.	Last Pr.	Bus. done.	Last Call.
700	Aberdovey (sil.-lead), Merioneth	1 10 0	30	..	0 10 0 0 10 Mar, 1882
4943	Alford Con. (copper), Phillack [S.E.]	3 12 0	3 1/2	..	20 3 0 0 2 6 April, 1882
3048	Carnyorth (tin), St. Austell	3 15 0	1 1/2	..	0 19 6 0 0 3 Sept, 1880
6000	Charlton Upl. (copper), Redruth	12 15 0	1 1/2	..	0 19 6 0 0 3 Sept, 1880
256	Concord (copper), Camborne	25 0 0	6 1/2	..	85 0 0 0 2 0 Aug, 1882
4072	Devon and Cornwall (copper)	5 16 8	3 1/2	..	0 10 0 0 2 6 Feb, 1882
672	Ding Dong (tin), Guisul	40 16 4	4 1/2	..	16 7 6 10 0 Mar, 1882
2048	East Falmouth (sil.-lead), Kenwyn, Ken	3 10 0	3 1/2	..	0 7 6 0 0 6 Jan, 1882
2048	East Wheal Lovell (tin), Wendron	2 13 6	..	..	0 8 0 0 0 6 Jan, 1882
1400	Eyan Mining Co. (lead), Derbyshire	7 2 6	22	..	20 3 4 0 0 0 May, 1881
4940	Fowey Con. (copper), Trowbridge	2 14 7	2	..	65 17 0 0 0 6 June, 1880
119	Great Work (tin), Gernoe	100 0 0	110	..	221 10 0 0 7 10 Feb, 1882
5000	Kelly Barr (lead), Callington	4 15 6	3 1/2	..	0 6 0 0 2 0 Feb, 1882
30	Laxey Mining Company, Isle of Man	100 0 0	1200	..	1420 0 0 0 10 June, 1882
160	Levant (copper), St. Austell	2 10 0	95	..	1091 0 0 0 5 0 May, 1880
400	Newtownards Mining Co., Co. Down	80 0 0	95	..	66 0 0 1 0 Sept, 1882
13000	Northdown Con. (copper), Whitechapel [S.E.]	0 16 0	3 1/2	..	0 10 0 0 2 6 July, 1882
128	South Crinoid (copper), St. Austell	10 0 0	38 1/2	..	60 0 0 2 0 June, 1882
6000	Tolvaddon (copper), Marazion	0 15 0	3	..	0 13 6 0 3 0 Mar, 1880
572	Trelawny Con. (tin), St. Austell	11 10 0	18	..	7 0 0 0 10 Sept, 1880
20300	Valley of Towry (lead), Carnarvon [S.E.]	0 14 6	3 1/2	..	0 5 0 0 1 0 July, 1882
256	West Damsel (copper), Gwennap	38 10 0	68	80 85	45 0 0 1 0 May, 1880
1024	Wheal Grylls (tin), Ferrantunhoe	2 4 0	26	23 1/2 24 1/2	1 12 0 0 7 6 Nov, 1882
4295	Wheal Kitty (tin), St. Agnes	4 16 6	4 1/2	3 1/2 4	0 18 6 0 2 0 July, 1882
1024	Wheal Margery (tin, copper)	8 0 0	8	..	0 10 0 0 10 Aug, 1882
1024	Wheal Tremayne (tin, copper), Gwennap	13 2 6	5	..	10 2 6 0 7 6 Jan, 1884

FOREIGN MINES.

Shares.	Mines.	Paid.	Last Pr.	Bus. done.	Last Call.
2464	Burra Burra (copper), South Australia	5 0 0	110 xd.	..	280 0 0 0 8 0 Dec, 1881
6000	Central American (sil.-lead), L.A.	5 0 0	13 1/2	..	2 8 0 0 14 2 June, 1882
13000	Cobro Copper Co. (copper), Cuba	10 0 0	8	..	98 12 0 0 1 0 May, 1882
13000	Copiapu Mining Company, Chile [S.E.]	10 0 0	8	..	6 0 0 0 5 0 Jan, 1881
18000	East Indian Con., Calcutta [L.]	10 0 0	10	..	7 1/2 per cent. Yearly
70000	English and Australian [S.E.]	5 0 0	2 1/2	..	1 7 6 0 2 6 Feb, 1882
25000	Fortuna (lead), Spain [L.]	3 0 0	3 1/2	..	0 2 6 0 2 6 May, 1882
25000	Glen Mining Assoc., Nova Scotia [S.E.]	120 0 0	23	..	19 6 0 1 0 June, 1882
60000	Kapunda Mining Co., Australia [S.E.]	1 0 0	1 1/2	1 1/2	0 10 0 0 1 0 June, 1882
18000	Linares (copper), Spain	10 0 0	7 1/2	..	0 10 0 0 1 0 June, 1882
10000	Lusitania (copper), Portugal [S.E.]	2 0 0	7 1/2	..	0 19 0 0 1 0 Feb, 1882
10815	Mariquita and New Granada [S.E.]	1 0 0	3 1/2	..	0 9 6 0 1 0 July, 1882
100000	Port Phillip (gold), Clunes [S.E.]	1 0 0	1 1/2	1 1/2	0 6 0 0 1 0 July, 1882
11000	St. John del Rey [L.], Brazil [S.E.]	15 0 0	58	56 57	50 15 0 0 4 10 June, 1882
30000	West Canada Mining Company [L.]	1 0 0	1 1/2	..	0 2 0 0 2 0 June, 1880

FOREIGN MINES WITH DIVIDENDS IN ABEYANCE.

Shares.	Mines.	Paid.	Last Pr.	Bus. done.	Last Call.
10000	Altan and Qumangan (tin), (copper) [L.]	4 10 0	3	..	4 5 0 0 15 0 Nov, 1882
10000	Gt. Barrier Lead, Min. Ac. N. Ze. [L.]	4 10 0	3 1/2	..	15 per cent. May, 1882
10000	Pontgibaud (sil.-lead), France [S.E.]	20 0 0	4	..	1 0 0 0 1 0 June, 1882
42174	Unit. Mexican (sil.), Mexico [S.E.]	28 0 0	7 1/2	7 1/2	1 16 6 0 4 0 Feb, 1882

NON-DIVIDEND FOREIGN MINES.

Shares.	Mines.	Paid.	Last Pr.	Bus. done.	Last Call.
20000	Australian (copper), South Australia [S.E.]	7 7 6	1 1/2	..	Sept. 1882
78000	Bon Accord, South Australia (copper) [L.] [S.E.]	1 0 0	1 1/2	1 1/2	..
25000	Capula (silver), Mexico [L.] [S.E.]	0 10 0	3 1/2	..	Jan. 1882
17000	Central Italian (copper) [7000 £2 paid]	0 6 0	—	..	Jan. 1859
60000	Clarendon Consols (copper), Jamaica [S.E.]	1 2 6	3 1/2	..	July, 1882
10000	Copado Smelting [L.], Chili	10 0 0	8 1/2	..	..Fully paid.
75000	Dun Mountain (copper), New Zealand [L.] [S.E.]	1 0 0	1	1	..Fully paid.
25000	East del Rey, Brazil [L.] [S.E.]	1 0 0	3	1 1/2 3	..Sept. 1882
80000	East Kongsberg Native Silver Mining Co. of Norway [L.] [S.E.]	1 7 6	3 1/2	..	..Mar. 1862
18000	Elbe Colliery Company [L.]	1 0 0	3 1/2	..	..Fully paid.
80000	Ellerslie and Bardowie, Jamaica	0 18 0	1 1/2	..	..July, 1859
8000	English and Canadian Mining Company [L.]	5 0 0	—	..	..Fully paid.
90000	Great Northern (copper), South Australia [L.] [S.E.]	1 10 0	3 1/2	1 1/2	..June, 1882
24000	Hindostan (copper), Bengal [L.] [S.E.]	1 0 0	3 1/2	..	..May, 1862
4000	Hope Silver-Lead and Copper Mining Co. [L.], Jamaica	25 0 0	—	1 1/2	..Fully paid.
50000	Imperial Thessalian (lead, etc.), Thessaly [L.] [S.E.]	0 10 0	3 1/2	..	..June, 1860
10000	Karibita Colliery Company [L.]	0 0 0	17 1/2	..	..Fully paid.
100000	Montes Aurores (gold), Brazil [L.] [S.E.]	1 0 0	1	..	..Jan. 1862
30000	Lagunas (sulphur, copper), Portugal [L.]	1 0 0	3 1/2	..	..Fully paid.
60000	New Granada (gold), South America [S.E.]	1 0 0	1 1/2	..	..Fully paid.
10000	New Grand Duchy of Baden (silver-lead), near Freiburg	1 0 0	1	..	..Nov. 1858
80000	North Rhine Copper of South Australia [L.] [S.E.]	0 17 6	1 1/2	..	..Fully paid.
16000	Pachuca Silver Mining Company, Mexico [L.] [S.E.]	0 15 0	—	..	..April, 1862
17000	Quesbrada (copper), Venezuela [L.] [S.E.]	0 10 0	1 1/2	1 1/2	..July, 1862
20000	Santa Barbara (gold), Brazil [L.] [S.E.]	0 10 0	1 1/2	1 1/2	..Mar. 1862
20000	Scottish Australian Mining Company [L.] [S.E.]	0 10 0	1 1/2	1 1/2	..Fully paid.
15000	South Europe Mining Company, Spain [L.] [S.E.]	3 0 0	—	..	..May, 1860
40000	St. John's United (copper, lead), Newfoundland [L.]	1 0 0	3 1/2	..	..Fully paid.
12000	Tepetit Colliery Co. [L.] [S.E.]	2 0 0	3 1/2	..	..Fully paid.
45000	Victor Emanuel, Italy [L.] [S.E.] [30,000 Pref. Shares, 15s. pd., 25,000 £1 pd.]	2 0 0	3 1/2	..	..Fully paid.
1000	Western Africa Malchite [L.] [S.E.]	110 0 0	—	..	..Fully paid.
12000	Wheel Ellen, South Australia [L.] [S.E.]	5 0 0	—	..	..Oct. 1859
34225	Wheel Jamaica (copper)	—	—	..	..Fully paid.
80000	Worthing (copper), South Australia [L.] [S.E.]	1 0 0	18 1/2	..	..Fully paid.
49000	Yndamutana (copper) South Australia [L.] [S.E.]	3 0 0	2 1/2	2 1/2	..Fully paid.